INTRODUCTION TO THE PHONOLOGICAL HISTORY OF THE SLAVIC LANGUAGES

by

TERENCE R. CARLTON

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Foreword

The twelve existing literary Slavic languages and the numerous dialects both living and extinct, all exhibit striking similarities in phonology, morphology, syntax and basic vocabulary that can be explained in only one possible way. That is, by assuming that all forms of Slavic speech are descended from a common ancestor, a parent-language which is referred to either as Proto-Slavic or Common Slavic. This unified parent-language had ceased to exist before any type of Slavic speech came to be preserved in written form. However, the science of historical linguistics is able to provide us with a fairly accurate picture of what that language was like through the various stages of its development. It is the purpose of an introductory textbook such as the present one to summarize the achievements of Slavic historical linguistics. By understanding the development of PSl especially in its final stage of disintegration one can understand how Slavic moved slowly but surely from unity to diversity, that is, from one more or less unified language to the present situation.

The study of PSl and its development into the existing languages and dialects is not really as difficult as it may seem at first mention, but it is complicated and can be tackled only after proper preparation. The interested student must have some preparatory information before proceeding to the main problems. The first five shorter chapters should provide this background. Chapter I will describe the Slavic languages as they exist at present — their number, size (number of speakers), geographic distribution, geographic relationship to each other and to their non-Slavic neighbors. Chapter II will supply the necessary data regarding the writing system employed for each Slavic language. One cannot discuss these languages without giving examples, and these are always cited in the standard orthography of the language in question. Such examples make no sense if the reader is unfamiliar with the orthographic systems involved. PSl itself is unattested, and investigators must rely rather heavily on the earliest form of Slavic preserved in written form, that is, on the testimony of the language known as Old Church Slavic. Students, therefore, must know something about this language — its origin, documentation and affinities to other Slavic languages. This will be discussed in chapter III. Finally, in chapter IV we will describe the origin of PSl itself and its affinities to other languages of Europe and Asia, that is, to its place in that broader family of languages known as Indo-European. Chapter V will present the achievements of historical and comparative linguistics in reconstructing the phonological system of Proto-Indo-European. This completes the basically introductory part of the text.

The next four chapters form the backbone of this work. Chapter VI deals

with processes which took place during or after the disintegration of PIE and which led to the emergence of a new linguistic entity called PSl. This chapter discusses only those processes which are common to all Slavic languages, that is, those occurring before the emergence of dialectal divisions within PSl itself. Chapter VII continues the story of the development of PSl but in its final period — the period of geographic dispersal of its speakers and the breakup of the language into dialects leading to the present situation. These two chapters are based largely on G. Shevelov (1965), *A Prehistory of Slavic,* and the present writer at this point wants to acknowledge the source of his information and inspiration.

Because of the complications involved in the prosodic features of Slavic, an entire separate section, chapter VIII, is devoted to this intricate problem. Here again the present author would like to acknowledge his debt to G. Shevelov (1965, Chapters 4, 32 and 33), and especially to C. Stang (1965), *Slavonic Accentuation.*

Finally, chapter IX attempts to outline these phonological features of each Slavic language which are traditionally considered as significant for the language in question. These include not only features which distinguish one language from among other Slavic languages but also those which unite it with others. The methodology and format for these summaries are based on K. Trofymovyč (1960), *Praktykum z porivnjal'noji hramatyky slovjans'kyx mov* but enlarged with more attention to detail.

* * *

The author is grateful to Doreen Hawryshko, the Secretary of the Department of Slavic and East European Studies at the University of Alberta, who patiently typed the first copy.

Dr. T. R. Carlton

Abbreviations Used in This Book

Re.: languages

Alb	Albanian
Arm	Armenian
Br	Belorussian
Blg	Bulgarian
Cr	Croatian
Cz	Czech
Eng	English
Fr	French
Grm	German
Gr	Greek
Kash	Kashubian
Lat	Latin
Lech	Lechitic/ Lekhitic
Lith	Lithuanian
LL	Lower Lusatian
Ltv	Latvian
M	Macedonian
OCS	Old Church Slavic/Slavonic
P	Polish
PIE	Proto-Indo-European
PSl	Proto-Slavic
R	Russian
Skr	Sanskrit
Sr	Serbian
SC	Serbo-Croatian
Slk	Slovak
Sln	Slovenian/Slovene
Ukr	Ukrainian
UL	Upper Lusatian

Others

acc.	accusative
adj.	adjective/adjectival
arch.	archaic
dat.	dative
dial.	dialectal
E	eastern, East
fem.	feminine
gen.	genitive
imp.	imperative
instr.	instrumental
loc.	locative
masc.	masculine
nom.	nominative
N	northern, North
O	Old
part.	participle
pers.	person (gram.)
sing.	sing.
S	southern, South
voc.	vocative
W	western, West

Transliteration of Cyrillic

The system for transliterating Cyrillic is given below. For the sake of historical accuracy Blg *а* and *я* will be transcribed as *ə* and *jə, ə* respectively when so pronounced and is explained in Note 1. Also the iotized vowels *(е, ё, є, я, ю)* will be transliterated in two ways depending on their function (see pp. 28-9, section 6). The use of *ǫ* for R *ё* is explained in Note 2.

А а	a, ə (Blg)	І і	i	Х х	x
	a (all others)	Ї ї	ji	Ц ц	c
Б б	b	Й й	j	Ч ч	č
В в	v	J j	j	Џ џ	dž
Ґ ґ	g (Ukr, Br)	К к	k	Ш ш	š
Г г	h (Ukr)	Ќ ќ	ќ	Щ щ	št (Blg)
	ɣ (Br)	Л л	l		šč (all others)
	g (all others)	Љ љ	lj	Ъ ъ	ə (Blg)
Ѓ ѓ	ǵ (M)	М м	m		’’ (R)
Д д	d	Н н	n	Ы ы	y
Ђ ђ	đ (SC)	Њ њ	nj	Ь ь	’
Е е	je, e (R, Br)	О о	o	Э э	ę
	e (all others)	П п	p	Ю ю	ju, ’u
Ё ё	jo, ’o, ǫ	Р р	r	Я я	ja, ’a, jə, ’ə (Blg)
Є є	je, ’e	С с	s		ja, ’a (all others)
Ж ж	ž	Т т	t		
З з	z	Ћ ћ	ć		
S s	dz	У у	u		
И и	y (Ukr)	Ў ў	w		
	i (all others)	Ф ф	a		

1. Blg *а, я* stand for *ə, jə, ’ə* in the following morphological categories:
   (a) the 1st person sing.: *неса, стоя, къпя - nesə, stojə, kəp’ə.*
   (b) the 3rd person plural: *несат, стоят, къпят - nesət, stojət, kəp’ət*
   (c) the masc. sing. postpositive article of soft-stem nouns in the nom. and oblique cases and of hard-stem in the oblique case only: *денят, деня, стола - den’ət, den’ə, stolə.*

2. Russian *ё* is transliterated by *ǫ* in those instances where it stands simply for *о*, that is, after *ж, ш, ч* or *щ* as in *жёлчь, шёлк, чёрный, щётка - žǫlč’, šǫlk, čǫrnyj, ščǫtka.* Thus, we are able to dinstinguish such forms as *чёла* vs *плечо - čǫla* vs *plečo.*

3. This system does not take into account the use of the apostrophe in Ukr or Br, but its presence is readily predictable. If any jotated vowel following a consonant has the value *j*+vowel, then an apostrophe is inserted before the iotized vowel. For example, Ukr *pidjixaty* and Br *padjexac’* are spelled respectively *nідʼїхати* and *падʼехаць.*

4. The transliteration system for OCS is given on pp. 54-6.

CHAPTER I

The Slavic Languages Past and Present

Name of the languge	*Approximate number of native speakers*	
A. THE EAST SLAVIC GROUP		
1. Russian	115,000,000	(See explanation No. 1 below)
2. Ukrainian	40,000,000	
3. Belorussian	8,000,000	
B. THE WEST SLAVIC GROUP		
1. Polish and	35,000,000	(See explanation No. 3, 6)
Kashubian	200,000	(See explanation No. 4)
2. Slovincian	extinct	(See explanation No. 10)
3. Polabian	extinct	(See explanation No. 8)
4. Pomeranian	extinct	(See explanation No. 9)
5. Upper Lusatian (Sorbian)	70,000	(See explanation No. 5)
6. Lower Lusatian (Sorbian)	30,000	
7. Czech	10,000,000	
8. Slovak	4,000,000	
C. THE SOUTH SLAVIC GROUP		
1. Serbo-Croatian	16,000,000	(See explanation No. 2)
2. Slovene	2,000,000	
3. Macedonian	1,500,000	
4. Bulgarian	8,000,000	
5. Old Church Slavic	extinct	

1. The number cited here is the number of persons acknowledging Russian as their mother tongue, but as the major language of the USSR, it is known by an additional 130,000,000 persons who speak it with varying degrees of fluency.

2. Serbo-Croatian occupied a position in Jugoslavia similar to that of R in the USSR. All citizens of Jugoslavia have studied it and use it as a *lingua franca.* This adds approximately another 5,000,000 persons to those knowing SC.

The linguistic fact that SC is a single language should not obscure the cultural fact that the Serbs and Croatians are two separate and distinct nationalities. One obvious expression of this is the use of two alphabets for this one language, the Croatians using a Latin script; the Serbs, a Cyrillic.

The situation is somewhat camparable to that of English being shared as a mother tongue by such widely separated nationalities as Englishmen and citizens of the USA. Obvious differences in phonology, morphology, idiomatic usage and even in spelling do not mean that there exists some sort of separate American language. On the cultural side, however, the situation is not comparable. Englishmen and Americans, at least, share a common Anglo-Saxon cultural heritage. They, therefore, have much more in common than do the Serbs and Croatians who in spite of their geographic proximity have each had very different histories. How two such culturally diverse nations came to share the same language will be discussed later. (See p. 333.)

3. The first four languages listed here form a special subgroup in West Slavic known under the name Lekhitic (also spelled Lechitic). They all have certain features in common which cannot be described here. However, one can be mentioned. It is the preservation of nasal vowels up to the present day (as in Polish and Kashubian) or up until the time of extinction (as is the case with Polabian, Slovincian and Pomeranian).

4. Kashubian is often listed as a separate language in textbooks on Slavic linguistics, and there are good reasons both for and against this position. Those who would consider it a distinct language not merely a dialect of P can point to the fact that Kashubian differs so markedly even from northern P dialects that mutual comprehension is often difficult if not impossible.

On the other hand, Kashubian itself is divided into several subdialects and this has been an important factor in preventing the development of any type of standardized literary language. The vast majority of published Kashubian material is folkloristic in nature and, therefore, reflexes the local dialect where it arose. However, the major factor preventing the development of Kashubian as a separate literary language is the fact that Kashubian speakers do not think of themselves as a separate nationality but either as Poles (if they are Catholics) or as Germans (if they are Protestants — this latter group is now for all practical purposes a thing of the past). It is hardly logical to assign a separate national status to a group of people who historically and culturally are firmly committed to another nationality?

5. The usual confusion in the use of the terms "Upper" and "Lower" can easily be avoided if one remembers that both Lusatian nationalities live along the Spree River and that this river flows northward. The Upper Lusatians are those who live along the upper reaches of the Spree, that is, in the uplands nearer the river's sources, in and around the city of Bautzen; the Lower Lusatians then are those living lower down the river, that is, further north, around the city of Cottbus.

6. The West Slavic languages have all lost considerable territory to neighboring languages but most significantly to German. Taking the year 800 AD as a convenient point of departure, it can be safely stated that Slavic speaking peoples had by then pushed westward approximately as far as a line running from Hamburg to Trieste. Then began a long process of German colonization and general expansion eastward, which continued until after the Second World War. At that time the western frontier of Poland was established on the Oder-Neisse Rivers and East Prussia became an integral part of Poland, from which territory the vast majority of German speakers emigrated to West Germany. A similar emigration occurred with the Sudeten Germans of Czechoslovakia. The vacated lands were resettled respectively by Poles and Czechs so that Slavic languages are again being spoken in areas where they had not been heard for centuries.

7. The lands vacated by German speakers after the Second World War were resettled by Poles and Czechs from all regions of their own territory. The type of P or Czech spoken in these areas is, therefore, a newly formed mixed dialect without historical roots in the area where it is spoken. The long common frontier between modern Poland and Czechoslovakia then does not, by any means, indicate that we have any transitional dialects along this border. Any such dialects, which may have existed at one time, had been inundated long ago by a broad wedge of German speakers. The only transitional dialect which managed to escape this German inundation is a very narrow strip running approximately from Racibórz (on the Polish side) to just west of Čadca (on the Czech side).

8. An analogous state of affairs (to that described in No. 7) also exists as regards P and Lower Lusatian; the two languages are now separated at certain points only by the Neisse River, whereas in 1939 the distance would have been approximately one hundred miles. Yet somewhere within that hundred-mile strip before German inundation, P and LL had been developing in a state of mutual influence since time immemorial. We possess two fairly extensive LL manuscripts from the sixteenth century which arose some forty or fifty miles east of the Neisse River, roughly in the area along the Bóbr River and on the right bank of the Oder. These extinct dialects of eastern LL had certain features which crop up again in those most westerly dialects of Polish which escaped germanization. The details of this interesting linguistic situation would have been extremely valuable to us not only for the individual histories of P and LL but also for the general history of Slavic settlement in that region.

9. Unfortunately, the type of data is, for the most part, lost to us forever. At least, as regards the territory of extinct eastern LL and western P some remnants still survive, but as far as the territory to the north and west of LL is concerned, the picture is even more cloudy, for here we have no sources of information except place-names. In concrete terms this means that in the study of West Slavic languages, several questions remain unanswered or even unanswerable. Some of these are:

— Where was the dividing line between a Lusatian-type of Slavic and a Lekhitic-type?
— What was the nature of any transitional dialects between these two language groups?
— If scholarship cannot answer questions No. 1 and 2, how can we establish the precise relationship between Lekhitic and either of the Lusatian languages?

A similar set of questions could be posed regarding P and Cz, Cz and UL and the relationship between Lower and UL. Some examples would be:

— Given the more mountainous nature of the terrain between UL and Cz, were these languages ever in close contact?
— Given the location of the Sudeten Mountains, it is obvious that no extensive P—Cz contact ever existed along the present Polish-Czech border, but
  (a) did some sort of contact ever exist beyond the Sudetens?
  (b) is the extant P—Cz mixed dialect of the Cieszyn area a remnant of something more extensive?
  (c) or is this dialect more or less the sum total of Czech-Polish contact since it exists in the only nonmountainous patch between the two groups?
— To what extent and in what areas did German colonization result in displacement and assimilation of Slavic speakers and to what extent did this colonization merely fill uninhabited territory?

The long border between Poland and Slovakia is also deceptive insofar as linguistic contacts are concerned. E Slk dialects exhibit many features reminiscent of Lekhitic and may have shared several common developments with P at a very early date. Beginning in the fourteenth century or perhaps earlier, P and E Slk became separated by a relatively thin wedge of Ukrainian speakers migrating westward. These Ukrainians were themselves subsequently strongly influenced by both P and Slk and being cut off from the mainstream of Ukrainian linguistic developments, they evolved a very specific type of dialect known in Ukrainian dialectology as Lemko. This dialect stretches approximately from the San River (in the east) to the Poprad—Dunajec Rivers (in the west) on both sides of the mountains.[1] The possibility of direct P—Slk linguistic contact is, therefore, limited to the area between the Poprad and Čadca — some one hundred fifty miles of relatively mountainous terrain.

10. Slovincian is the name applied to the most westerly form of Kashubian

[1] In connection with the actions of the Ukrajins'ka Povstans'ka Armija, the Lemko speakers on the Polish side of the frontier (on the north slope) were forcibly evacuated from this area after World War II. The original Lemko dialect now exists only on the Slovak side of the mountains.

formerly spoken in the region of Lakes Gardno and Łebsko (northeast of Słupsk). It became extinct or more accurately ceased to be used as a living language sometime prior to the Second World War. However, as late as 1959 Polish dialectologists were still able to discover certain elderly persons in the area who could remember isolated words and phrases. Fortunately, it had been well studied and documented before its disappearance.

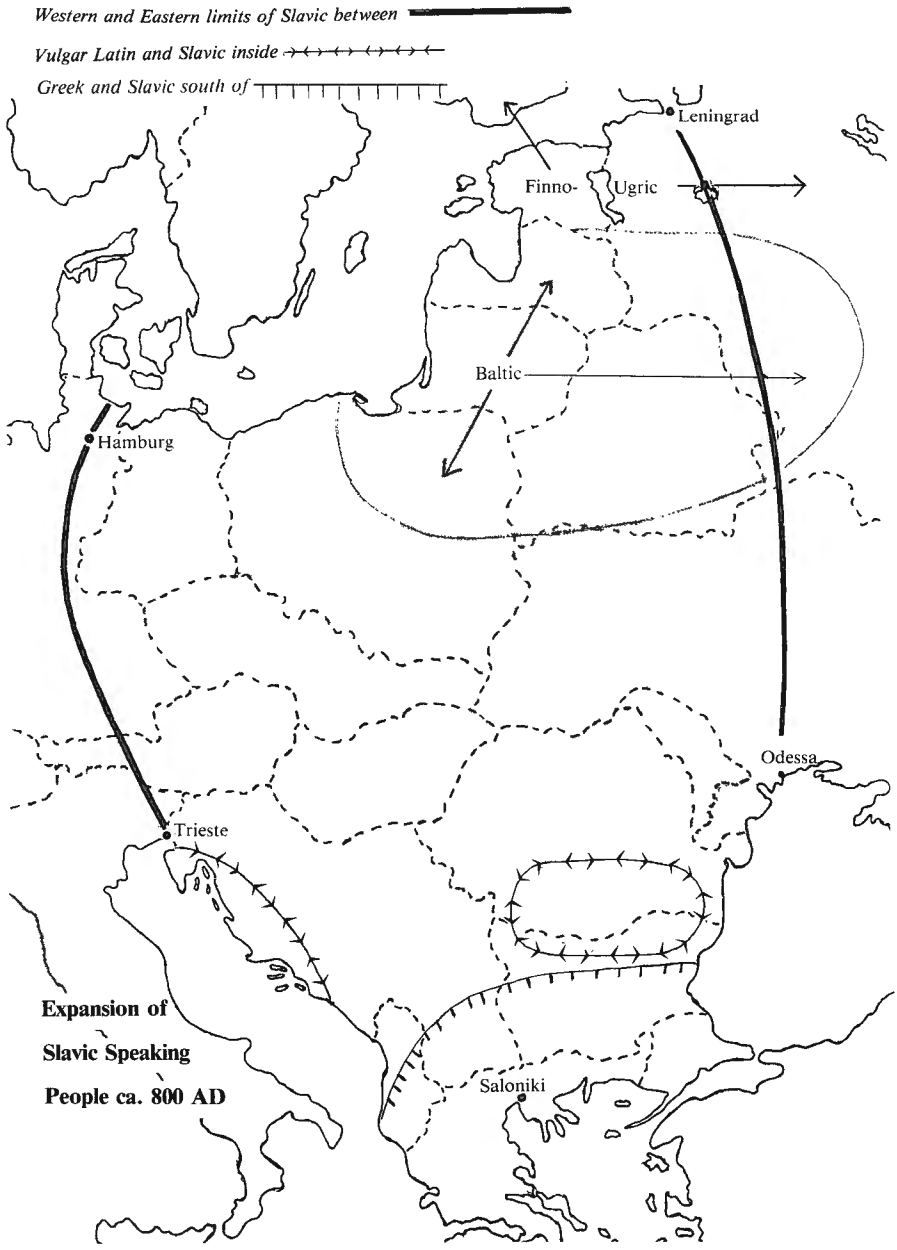
11. Polabian has been extinct since the middle of the eighteenth century. It was formerly spoken in what is now West Germany on the left bank of the Elbe, south and east of Lüneburg. In the years just prior to its disappearance, various interested persons in the area collected folklore and compiled word-lists and phrases. Unfortunately, only one of these persons was a native speaker of Polabian and he left only thirteen pages (out of a 310-page manuscript) of linguistically relevant material. All in all we possess something less than 3000 words, and with the exception of a wedding song and a few prayers and phrases none of it is in the form of a connected text. It is, therefore, quite understandable why there exist such appalling gaps in our knowledge of this language.

12. Pomeranian is a cover term referring to those dialects of Lekhitic formerly spoken along the Baltic coast and extending inland to a line where it would have met some form of Lusatian. Roughly speaking, this would include Mecklemburg in East Germany and the Polish provinces of Szczecin and Koszalin. In other words, it takes in everything between Polabian in the west to Slovincian in the east. The only data available from this area are limited to personal and place-names recorded in German documents mainly from the twelfth to fourteenth centuries, and this documentation is too meagre to permit us to reconstruct any internal dialectal differences.

The West Slavic languages were not the only ones to have lost ground to other languages. All of eastern Austria and modern Hungary were Slavic speaking at the beginning of the ninth century AD. It is highly probable that some of the dialects in this area were transitional between S and W Sl, that is, they would have contained features of both groups. A remnant of this former situation is seen in the fact that we have some S Sl features in central Slk and W Sl features in NW Sln.

When the Slavs entered the Balkans in the sixth century AD they encountered a Romance (postclassical Latin) speaking population in the north and west of present day Jugoslavia and in the south and east of modern Romania. The Slavs assimilated the Romance speakers everywhere except in the east. Here after a long period of coexistence (coupled with a high degree of bilingualism?), the Romance speakers finally assimilated the Slavs. The resulting language is, of course, modern Romanian. Again the loss of Slavic speakers in this area has deprived us of the possibility of studying whatever transitional dialects may have existed between E Bulgarian or SW Ukr.

Further south the Slavs encountered Greek speakers in what is now Bulgaria,


Western and Eastern limits of Slavic between
Vulgar Latin and Slavic inside
Greek and Slavic south of
Leningrad
Finno-
Ugric
Baltic
Hamburg
Odessa
Trieste
Saloniki
Expansion of
Slavic Speaking
People ca. 800 AD

Latvian
Lithuanian
Russian
Pomeranian
Slovincian
Belorussian
Polish
LL
LL
LL
Ukrainian
Czech
Slovak
Moldavian
Hungarian
Romanian
Slovene
Croatian
Serbian
Bulgarian
Macedonian
Turkish
Albanian
Greek
Turkish
Modern
Distribution of
Slavic Languages
///// The extent of German before 1945
..... The western and northern border of Polish in 1939
— — — contemporary international boundaries
—/—/—/—/ linguistic boundaries within a multilingual state

Macedonia and Thrace (now Turkey's only European territory but long before the Turks arrived). Those Slavs who penetrated any further south than approximately the city of Saloniki (Thessalonica) were assimilated by the Greeks whereas in the north Greek was gradually but steadily replaced by Slavic. Even today the present political borders of Greece, Turkey, Bulgaria and Jugoslavia may not always correspond to the linguistic reality of the region. After the First and Second Balkan Wars (1912-13) and the First World War, vast numbers of Bulgarian speakers resettled from European Turkey to Bulgaria. On the Greek side of the border, however, there were still Slavic speaking villages within 20-30 miles of Saloniki as recently as the 1930s, but at the present time it is difficult to gather data on whatever Slavic speakers may still exist in northern Greece.

When the Slavs migrated into the area which is now Belorussia and north-eastern Poland, they encountered people speaking Baltic dialects, that is, a type of speech akin to Lithuanian and Latvian. These people were in time completely absorbed by the Slavs. Further to the north and east they came into contact with speakers of various Finno-Ugric dialects; most but not all of these people were also assimilated. Did, however, all of these non-Slavic peoples simply disappear without trace? If not, then we are dealing with the phenomenon of a substratum. According to this theory an aboriginal people (the linguistic substratum) while acquiring the language of more numerous or more powerful newcomers may in some way influence the development of the latter language. Thus, certain features of Belorussian and S R are often attributed to a Baltic substratum and some features of N R attributed to a Finno-Ugric substratum.

On the map opposite, the boundaries as established after the Second World War are marked with a broken line (- - -). Languages within the confines of one state are marked off by means of —/—/—.

The slanted shaded area shows the expansion reached by German prior to 1945. The areas within the borders of Poland and Czechoslovakia are now occupied by Polish and Czech speakers respectively.

CHAPTER II

The Slavic Writing Systems

The Latin and Cyrillic alphabets. Here are listed all the symbols employed in each alphabet in the order established by the orthographic traditions of each language. This will enable readers to look up entries in a dictionary.

Notice that for most of Lat-based alphabets, it is customary to treat digraphs as separate entities. Thus, in a Cz, Slk, UL or LL dictionary all forms beginning with *ch* are found not under *c* but have their own section after *h*. Only P uses digraphs extensively without treating them as separate alphabetic units. Therefore, these digraphs are listed after the P alphabet. On the other hand, all symbols formed by the addition of a diacritic (as P *ć, ł* or *ż;* Cz *č, ť* or *ž,* etc.) are treated as separate letters in all the Lat-based systems.

The use of digraphs is rare in the Cyrillic-based systems but they are never treated as separate units in dictionary entries. The use of diacritics is also rare but here usage differs. *ë*-forms are listed under *e* in R but have a separate section in Br.

Some writing systems have undergone reforms in relatively recent times, but older textbooks and reference works often cite forms in the pre-reformed spelling. Therefore, where applicable, we cite those symbols no longer used in the modern orthography.

THE LATIN ALPHABETS

1. POLISH: a ą b c ć d e ę f g h i j k l ł m n ń o ó p r s ś t u w y z ź ż. Digraphs: ch, cz, dz and dź, dż, rz, sz.
2. CROATIAN: a b c ć č d dž đ e f g h i j k l lj m n nj o p r s t u v z ž.
3. SLOVENE: a b c č d e f g h i j k l m n o p r s š t u v z ž.
4. UPPER LUSATIAN: a b c č d dź e ě f g h ch i j k ł l m n ń o ó p r ř s š t ć u w y z ž. The following were discarded after the reform of 1949: ƀ, kh, ḿ, ṕ, ŕ, ẃ.
5. LOWER LUSATIAN: a b c č ć d dź e ě f g h ch i j k ł l m n ń o p r ŕ s š ś t u w y z ž ź. The following were dropped after the reform of 1952: ƀ, ḿ, ó, ṕ, ẃ.
6. CZECH: a á b c č d ď e é ě f g h ch i í j k l m n ň o ó p r ř s š t ť u ú ů v x y ý z ž. Digraph: ou.
7. SLOVAK: a á ä b c č d ď dz dž e é f g h ch i í j k l Ĺ ľ m n ň o ó ô p r ŕ s š t ť u ú v y ý z ž.

THE CYRILLIC ALPHABETS

1. RUSSIAN: а б в г д е (ё) ж з и й к л м н о п р с т у ф х ц ч ш щ ъ ы ъ э ю я. The following were discarded after the reform of 1918: і, ѣ, ѳ, ѵ and final silent ъ.
2. BELORUSSIAN: а б в г ґ д е ё ж з і й к л м н о п р с т у ў ф х ц ч ш ы ь э ю я. Digraphs: дж, дз.
3. UKRAINIAN: а б в г ґ д е є ж з и і ї й к л м н о п р с т у ф х ц ч ш щ ю я ь. Digraphs: дж, дз.
4. BULGARIAN: а б в г д е ж з и й к л м н о п р с т у ф х ц ч ш щ ъ ь ю я. The symbol ѫ was abandoned as early as 1899, and ѫ, ѣ in 1945 as well as the use of silent final ь, ъ.
5. MACEDONIAN: а б в г д ѓ е ж з ѕ и ј к л љ м н њ о п р с т ќ у ф х ц ч џ ш.
6. SERBIAN: а б в г д ђ е ж з и ј к л љ м н њ о п р с т ћ у ф х ц ч џ ш.

The relationship between sound and symbol. The information contained in each column below is as follows:

1. In this column are listed all the symbols and digraphs used in both the Cyrillic and Lat-based writing systems. A symbol whose function differs from language to language will be cited several times — once for each phonetic value.
2. The approximate phonetic value. The traditional term "soft" will be used instead of the more accurate but cumbersome "palatalized." An apostrophe before a vowel indicates that this symbol is used to mark the softness of a preceding consonant.
3. The language(s) for which a given symbol is employed.
4. The equivalent symbol in the other system (Lat for Cyrillic and vice versa) if one exists.

THE CYRILLIC CHARACTERS

1	*2*	*3*	*4*
А а	*a* as in *father*	all	a
Б б	*b* as in *bet*	all	b
В в	*v* as in *vane*	all	v, w (P)
Г г	(1) *h* as in *aha*	Ukr only	h in Cz, Slk
Г г	(2) same as *x* but voiced	Br only	—
Г г	(3) *g* as in *go*	all others	g
Ґ ґ	*g* as in *go*	Ukr, Br	g
Д д	*d* as in *do*	all	d
Дж дж	*j* as in *jam*	all but Sr, M	dž, dż (P)

1	*2*	*3*	*4*
Дз дз	*ds* as in *pads*	all but M	dz
Ђ ђ	soft *j* as in *jam*	Sr only	đ in Cr
Ѓ ѓ	same as *ђ*	M only	đ in Cr
Е е	(1) *e* as in *bet*	Ukr, Blg, M, Sr	e (except Slk)
Е е	(2) *'e* and *ye*[1]	R, Br	je
Є є	as *e* in R	Ukr only	je
Ё ё	as *yo* in *yore, 'o*	R, Br	jo
Ж ж	*s* as in *pleasure*	all	ž, ż (P)
З з	*z* as in *zone*	all	z
S s	same as *ȯз*	M only	dz
И и	(1) *i* as in *it*	Ukr only	y in P, LL, UL
И и	(2) *i* as in *machine*	Blg, M, Sr	i in Sln, Cr
И и	(3) *'i* and *yi*[2]	R only	—
І і	(1) same as R *и*	Br only	—
І і	(2) *'i* (never *yi*)[2]	Ukr only	i in all but Sln, Cr
Ї ї	as *yi* (never *'i*)[2]	Ukr only	ji
Й й	*y* as in *yet, they*	all but M, Sr	j
J j	same as *ŭ*	M, Sr	j
К к	*k* as in *kind*	all	k
Л л	*l* as in *lake* and *pal*	all	l
Љ љ	(1) soft *l*	Sr only	lj in Cr
Љ љ	(2) *l* as in *like*	M only	—
М м	*m* as in *mile*	all	m
Н н	*n* as in *nice*	all	n
Њ њ	soft *n*	M, Sr	nj in Cr
О о	*o* as in *more*	all	o
П п	*p* as in *spin*	all	p
Р р	rolled *r*	all	r
С с	*s* as in *set*	all	s
Т т	*t* as in *stay*	all	t
Ћ ћ	soft *ch* as in *chin*	Sr only	ć in Cr
Ќ ќ	same as *ћ*	M only	ć in Cr
У у	*u* as in *yule*	all	u
Ў ў	*w* as in *won, now*	Br only	ł in P, LL, UL
Ф ф	*f* as in *fine*	all	f
Х х	as Grm *ch* in *nach*	all	ch, h (Cr, Sln, P)
Ц ц	*ts* as in *cats*	all	c
Ч ч	*ch* as in *chin*	all	č, cz (P)

[1] Here *e* refers to the *e* as in *bet*, never to *e* as in *be*.

[2] Here *i* refers to the *i* as in *machine*, not to *i* as in *mine* or *it*.

1	*2*	*3*	*4*
Ш ш	*sh* as in *ship*	all	š, sz (P)
Ц ц	same as дж	M, Sr	dž, dż (P)
Щ щ	(1) as *ш* + *ч*	Ukr	šč, szcz (P)
Щ щ	(2) as *ш* + *т*	Blg	št, szt (P)
Щ щ	(3) long soft *ш*	R	—
— ъ	(1) hard sign	R	—
Ъ ъ	(2) *u* as in *but*	Blg only	—
— ы	*oo* as in *moon* without rounding	R, Br	—
— ь	soft sign	all but M, Sr	—
Э э	*e* as in *bet*	R, Br	e (except Slk)
Ю ю	*yu* as in *yule, 'u*	all but M, Sr	ju
Я я	*ya* as in *yard, 'a*	all but M, Sr	ja

THE LATIN CHARACTERS

A a	*a* as in *father*	all	а
Á á	long *a*	Cz, Slk	—
Ą ą	nasal *o* as in Fr *bon*	P only	—
Ä ä	*a* as in *at*	Slk only	—
B b	*b*	all	б
C c	*ts* as in *nuts*	all	ц
Ć ć	(1) soft *ts*	P, LL, UL[3]	ць
Ć ć	(2) soft *č*	Cr only	ћ in Sr
Č č	*ch* as in *church*	all but P	ч
Cz cz	same as *č*	P only	ч
D d	*d*	all	д
Ď d'	soft *d*	Cz, Slk	дь
Đ đ	soft *j* as in *jam*	Cr only	ђ in Sr
Dz dz	*ds* as in *adds*	P, Slk	дз, s (M)
Dź dź	soft *dz*	P, UL, LL	дзь
Dž dž	*j* as in *jam*	all but P	дж, ц (Sr, M)
Dż dż	same as *dž*	P only	as above
E e	(1) *e* as in *bet*	all but Slk	э in R, Br; e elsewhere
E e	(2) as *'e*[4]	Slk only	e in R, Br
É é	long *e*	Cz, Slk	—
Ę ę	nasal *e* as in Fr *bien*	P only	—
Ě ě	(1) *ye* as in *yet, 'e*[4]	Cz only	—

[3] In modern UL *ć* has become *č* so that both consonants of *čuće* are pronounced identically. Some dialects still retain *ć* (soft *ts*) as a sound distinct from *č*, as *ć* vs *cz* in P.

[4] See footnote 1 on p. 23.

1	*2*	*3*	*4*
Ě ě	(2) *'i*[e] (between *i* and *e*)	UL, LL	—
F f	*f*	all	ф
G g	g	all	г in R, Blg, M, Sr
H h	(1) *h* as in *aha*	Cz, Slk, UL, LL	г in Ukr
H h	(2) *ch* as in Grm *nach*	Sln, Cr, P	х
Ch ch	*ch* as in Grm *nach*	Cz, Slk, UL, LL, P	х
I i	(1) *i* as in *machine*	Cr, Sln	и in Blg, M, Sr
I i	(2) *'i*[5]	all others	и in R; i in Ukr, Br
I í	long *'i*[5]	Cz, Slk	—
J j	*y* as in *yet*	all	j in M, Sr; й elsewhere
K k	*k*	all	к
L l	*l* as in *low*[6]	all	л
Ł ł	*w* as in *wage*[6]	P, LL, UL	ў in Br
Ľ ľ	soft *l*	Slk only	ль
Ĺ ĺ	long vocalic *l*	Slk only	—
Lj lj	soft *l*	Cr, older Sln	ль, љ in Sr
M m	*m* as in *more*	all	м
N n	*n* as in *nine*	all	н
Ń ń	soft *n*	P, UL, LL	нь
Ň ň	soft *n*	Cz, Slk	нь
Nj nj	soft *n*	Cr, older Sln	њ in Sr
O o	*o* as in *more*	all	о
Ou ou	*ow* as in *grow*	Cz only	—
Ó ó	(1) long *o*	Cz, Slk	—
Ó ó	(2) *u*[o] between *u* and *o*	UL, LL	—
Ó ó	(3) same as *u*	P only	у
Ô ô	*uo*	Slk only	—
P p	*p* as in *pipe*	all	п
R r	rolling *r*	all	р
Ř ř	*r* + *ž* as one sound	Cz only	—
Ř ř	same as *š*	UL[7]	ш
Ŕ ŕ	(1) long vocalic *r*	Slk only	—
Ŕ ŕ	(2) soft *r*	LL only	рь
Rz rz	same as *ž*	P only	ж
S s	*s* as in *set*	all	с
Ś ś	soft *s*	P, LL	сь
Š š	*sh* as in *show*	all but P	ш

[5] See footnote 2 on p. 23.

[6] In older P, UL and LL *l* had the value of soft *l* and *ł* was hard *l*.

[7] *ř* is used only after *k*, *p* and *t*. *tř* is now pronounced as soft *ts*.

1	*2*	*3*	*4*
Sz sz	same as *š*	P only	ш
T t	*t* as in *trip*	all	т
Ť ť	soft *t*	Cz, Slk	ть
U u	*u* as in *rule*	all	у
Ů ů	long *u*	Cz only	—
Ú ú	long *u*	Cz, Slk	—
V v	*v* as in *vane*	all but P	в
W w	(1) *v* as in *vine*	P only	в
W w	(2) *w* as in *wage*	UL, LL	ў in Br
Y y	(1) *i* as in *it*	P, UL, LL	и in Ukr
Y y	(2) *i* as in *machine*	Cz, Slk	—
Ý ý	long *i*	Cz, Slk	—
Z z	*z* as in *zone*	all	з
Ž ž	*s* as in *pleasure*	all but P	ж
Ż ż	same as *ž*	P only	ж
Ź ź	soft *z*	P, LL	зь

The problem of marking palatalized consonants. The presence of palatalized (or soft) consonants in Slavic speech and the necessity to indicate this in the orthographic systems accounts for many of the additions to the Latin-based alphabets and also for the so-called *iotized* vowel in the Cyrillic systems. Since none of the languages has developed a completely consistent system for marking this feature, it will be necessary to explain the rules for each language or group of languages where the details overlap.

1. In Cz only *d, t, n* can be soft or palatalized. This is marked with *ď, ť, ň.* If *e* follows one of these, then the diacritic is placed over *e*, not over or beside the consonant. Thus *dě, tě, ně* (not *ďe, ťe* or *ňe*) as oppose to *ďa, ťa* or *ňa,* etc.

The symbol *ě* is also written after labials (*b, p, v, m*) where it now has the value of *ye* (as in *yet*). Thus, *pět* 'five' is pronounced exactly as if written *pjet.* Formerly *ě* marked the palatalization of a preceding labial.

If *i* or *í* follows *ď, ť, ň,* then no diacritic is necessary at all. We write simply *di, ti, ni*, never *ďi,* etc. If we must indicate hard *d, t, n* + the same vowel, then we use *y* or *ý*. Thus, in *díl* vs *dým* it is the consonant, not the vowel that differs: *dí* = soft *d* + long *i*, whereas *dý* = hard *d* + long *i*. In all other instances the use of *i* vs *y* or *í* vs *ý* is purely historical. Thus, *síla* 'strength' is spelled with *í* as opposed to *ý* in *sýr* not because there is a contrast of *s'* vs *s* but because there used to be.

2. In Slk *d, t, n,* and *l* can be soft and are marked *ď, ť, ň* and *ľ* (not to be confused with *ĺ,* the long vocalic *l*). The symbols *i, í* vs *y, ý* are used in exactly the same way as in Cz, including their retention for historical reasons where they are

no longer needed for marking hard vs soft; *i* also marks softness when it is the first member of the diphthongs *ia, ie, iu* as in *diat' sa* 'to occur' or *liat'* 'to pour'.

When one of the soft consonants is followed by *e,* then no diacritic is used at all. Thus, we write simply *de, te, ne, le*, not *ď'e*, etc.[8] This means that in Slk there is no way to spell hard *d, t, n,* or *l* + *e,* but this occurs so seldom that there is no need to mark it. Most grammars and dictionaries of Slk contain a short list of words or forms in which *d, t, n, l* are hard before *e* as, for example, in *jeden* 'one'.

3. In P the soft diacritic (*ć, ń, ś, ź*) is used in much the same way as *ь* in R or Ukr. That is, it occurs only when no vowel follows the soft consonant. If *i* follows one of the soft consonants, nothing else is necessary. *ci, ni, si, zi* are all to be read as soft *c, n, s, z* + *i;* one never writes *ći, ńi* etc. If any other vowel follows, than a silent *i* is inserted between the soft consonant and the vowel. Thus, soft *c* + *e* is written *cie*, not *će*; similarly *cio, ciu, cię, nia, niu*[9] but never *ćo, ću, ćę, ńa, ńu.*

Polish can also have soft *b, p, m, w, k, g* and *ch* but only when followed by a vowel; therefore, no "soft mark" is needed. It suffices simply to write *i* or use the silent *i,* as in *pić, pięć, ginąć* or *giąć* with soft *p* and *g.*

Polish also has (or rather had) hard and soft *l.* Soft *l* is written simply as *l* (without any diacritic) whereas hard *l* is written *ł.* Therefore, soft *l* + any vowel is written simply *l* + *i, e, a,* etc., without any silent *i.* In modern P, however, soft *l* has hardened[10] and hard *l* has become *w* (as in Eng *went, win*). That is, syllables like *la* vs *ła*, formerly read as soft *l* + *a* vs hard *l* + *a* (or *ля* vs *ла* in R, Ukr) are now hard *l* + *a* vs *w* + *a.*

4. In both Lusatian languages the symbols *l* and *ł* are used in exactly the same way as in P, for in all three languages both hard and soft *l* have many parallel developments. That is, the formerly soft *l* (spelled simply *l*), and hard *l* (spelled *ł*) > *w.*[11]

The symbols *dź* and *ć* in UL and *dź, ć, ś, ź* in LL are used absolutely consistently. That is, the diacritic is never replaced by any other device in any circumstances. Thus, we write *kosć, kosći, kosću, kosće, dźěłaće* etc., never replacing the "soft mark".

The soft mark with *ń* and *ŕ* is used only when no vowel follows. *ń* and *ŕ* + *i* or *ě* are written simply *ni, ně* and *ri, rě,*[12] not *ńi, ńě* etc. If any other vowel follows, then a "silent j" is inserted before the vowel, that is, *nja, nje, njo* etc., never *ńa, ńe, ńo*, or *rja*, never *ŕa* etc.

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[8] Compare Slk *deti* 'children' as opposed to Cz *děti* in which both *d* and *t* are soft in both languages. Note that *d'* + *e* are spelled differently but *t'* + *i* identically.

[9] These P spellings must not be confused with those of Slk where *i* is part of a diphthong. Thus, *nia* = *n'a* (Cyr. *ня*) in P but *n'* + *i* + *a* in Slk.

[10] Only in *l* + *i* is the historically soft *l* still palatalized in P.

[11] The old soft *l* + *i, ě, e* is still slightly palatalized, and the new *w* from the former hard *l* merged with an already existing *w* so that forms like *łono* and *wono* are now pronounced identically.

[12] Remember that *ě* of UL and LL stands for a distinct vowel and is not to be confused with *ě* of Cz. For example, Cz *ně* = UL *nje* whereas UL *ně* = *n'i*^{e} which has no equivalent in Cz.

In both UL and LL *p, b, m, w, k, ch, h* and *g* can be soft but only when followed by a vowel. Therefore, *i, ě* or silent *j* can be used. For example, in *pić, pěc, pjec, pjata* or *kěrluš, kidać, kjawkać p* and *k* are soft.

Until the spelling reform of 1952, LL did not use the silent *j* device to mark the palatalization of *n, r, p, b, m, w* but simply marked them with ´ everywhere, that is, *ṕeńeze* instead of the present *pjenjeze*. Both UL and LL used to mark soft *p, b, m, w* and *r* where they no longer existed in the spoken language, that is, when no vowel followed. For example, *gołuƀ* (LL) and *hołƀ* (UL) or *ẃeŕba* (LL) and *wjeŕba* (UL) are now spelled *gołub, hołb* and *wjerba* (both LL and UL).

5. In SC only *l* and *n* can be soft and in M only *n*. These are spelled as follows: *lj, nj* in Cr; *љ, њ* in Serbian and *њ* in Macedonian. These symbols are used absolutely consistently and never alter regardless of their position in a word. Thus, in Sr and M we write *коњ, коњски, коњар, коњик* and in Croatian *konj, konjski, konjar, konjik*. In M *љ* has quite a different function. It stands not for soft *l* as it does in Sr but for a middle *l* (that is, neither hard nor soft — as Eng *l* in *leap*) whereas *л* represents so-called dark *l* (as in Eng *pal*). The occurrence of middle *l* vs dark *l* is usually predictable in M; middle *l* occurs only before *i, j* and *e*, and dark *l* elsewhere. The use of *љ* is, however, restricted to those situations (largely in borrowings) when a middle *l* occurs in an environment where dark *l* is expected. Thus, there is no need for a distinct symbols in *лист* vs *бела* (*л* + *и* = middle *l* vs *л* + *а* = dark) but *љ* must be used in forms like *бељa, љуби, дeтаљ* where middle *l* is not predictable.

Slovenian used to have soft *l* and *n* which were spelled *lj* and *nj* as in Cr. When followed by a vowel soft *l* and *n* have become *l* + *y* and n + y; elsewhere they hardened. Thus, we still write *kralj, konj, konjski* in which *l* and *n* are no longer soft. However, in *kraljev* or *konjar lj* and *nj* are pronounced as a sequence of two sounds, that is, *l* + *y* and *n* + *y* as in *pale yellow* or *vineyard* (as opposed to SC *краљев, коњар* or *kraljev, konjar* where *љ, њ, lj, nj* = soft *l* + *n*).

6. R, Br, Ukr and Blg all use essentially the same system. To mark softness, the consonant symbols themselves are never altered nor are diacritics of any type added. Instead of this, special vowel symbols, known as *iotized* vowels, are used to indicate that a preceding consonant is soft. To illustrate this, we may cite a series of syllable-pairs using *л*[13] followed first by a non-*iotized* vowel and then by its *iotized* counterpart, as used in each of the languages. For example, the first syllable in each pair (e.g. *ла*) represents a hard *l* + *a* whereas *ля* represents a soft *l* + the same vowel. A missing member (marked by means of ø) in any of the pairs simply means that no such syllable occurs in the language concerned. Thus, *ле* - *ø* indicates that there is no way to spell soft *l* + *e* in Blg.

[13] *л* merely stands for any consonant capable of being soft.

R: *ла - ля, лэ - ле, ло - лё, лу - лю, лы - ø, ø - ли*[15]
Br: *ла - ля, лэ - ле, ло - лё, лу - лю, лы - ø, ø - лі*
Ukr: *ла - ля, ле - лє, ло - льо, лу - лю, ли - ø, ø - лі* (formerly *лї*)
Blg: *ла - ля, ле - ø, ло - льо, лу - лю, ли*[16] *- ø, лъ - ля*

In all other circumstances, that is, when no vowel follows, softness is indicated by means of *ь* — the so-called soft sign. For example, in Ukr we write *кінь, кіньми* vs *коня, конюх* or *коні* where *н* is soft in all forms.

If an *iotized* vowel is used in any other situation, that is, in initial position, after a vowel or after *ъ, ь,* or an apostrophe, then it has a different function. It stands for *y* + the same vowel that it normally represents. For example, *е* in R *есть, знает,* or *съесть* has the value *ye* (as in *yet*), or *ю* in Ukr *юшка, чую, під'юдити* is to be read as *yu*. That is, only after a consonant can the *iotized* vowels be used to mark palatalization and only a symbol used to mark palatalization can be read with the *y*-on-glide.

Thus, in Ukr or Blg *е* is never read as *ye* because it never softens a preceding consonant; one would have to write *є* in Ukr and *йе* in Blg.

Russian *и* has the value *yi* only when it occurs after a vowel but not in initial position (except for some rare instances). Ukr *і* never stands for *yi*; only *ї* has this value.

When *ъ* or *ь* (in R) and *ь* or *'* (in Ukr and Br) are used before an *iotized* vowels they are referred to as "separation signs". The textbooks usually describe consonants before *ъ* or *'* as being hard in such examples as *съесть* (R) and *під'юдити* (Ukr). Rather *ъ* and *'* + an *iotized* vowel indicate the presence of *y* after a consonant, and some degree of palatalization automatically occurs after *y*. The textbooks further state that a syllable like *зъя* in R (or *з'я* in Ukr, Br) is to be read as hard *z* + *ya* whereas *зья* as soft *z* + *ya* but the difference is minimal.

The marking of prosodic features. By prosodic features we are referring to such things as stress, quantity (that is, distinctive length or brevity of vowels) and pitch (also called intonation). With the exception of Cz and Slk, these important features are not marked in any of the standard Slavic orthographies but must be indicated in dictionaries, grammars or other reference works.

1. Languages having only distinctive stress: R, Br, Ukr, Blg.

In R, Br, and Ukr reference works, stress is marked by placing an acute accent over the stressed vowel, that is, *му́ка* vs *мука́.*

In Blg, on the other hand, stress is usually marked with the grave accent, that

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[14] Slavic phonologists are agreed that the sounds written *и - ы* in R (also *і - ы* in Br) are allophonic variants of a single phoneme, but this table emphasizes the phonetic facts that there can be no soft consonant + *ы* nor hard consonant + *и* (or *і* in Br).

[15] *и* is a very confusing symbol for those familiar with only one Cyrillic system. It stands for *i* as in *it* only in Ukr. Everywhere else it stands for *i* as in *machine* but only in R does soften a preceding consonant. Br does not use it.

is, *мѣ̀ка, главà, садя̀* although occasionally the acute may be used instead.

2. Languages having only distinctive quantity: Cz, Slk.

These are the only Slavic languages in which a prosodic feature is indicated in the standardized orthography. Therefore, everything written in Cz or Slk regularly marks the long vowels by placing an acute accent over the necessary vowel symbol. Any unmarked vowel is, therefore, short. Thus, for example, in Cz *píši,* the first vowel differs from the second only in length, that is, the duration of its articulation is longer than that of the second.

For historical reasons Cz uses two methods to indicate long *u* — *ú* and *ů*. *Ú* is used in initial position; *ů,* everywhere else, that is *úřad* vs *dům* or *vozů.*

3. Languages with stress, quantity and pitch: SC, Sln.

The SC situation: We may exemplify the SC system of diacritic by using *a* to represent any vowel:

â = stressed, long with falling intonation
á = stressed, long with rising intonation
ȁ = stressed, short with falling intonation
à = stressed, short with rising intonation
ā = unstressed but long without intonation
a = unstressed and short without intonation

Thus, in *pȋšēmo* the diacritic over *i* gives us three pieces of information. It tells us not only that *i* is stressed (so would *í, ì* or *ȉ*) but that it is long and has a falling intonation. The other vowels are, therefore, unstressed and as such cannot have intonational differences. Unstressed vowels, however, can differ in quantity and this can be indicated by the length mark (in *ē*) vs its absence (in the case of *o*).

The Sln situation: The system of diacritics is complicated by two facts:

Firstly, Sln reference material uses two distinct systems: an older one which marks stress, length and intonation, and a newer one that marks only stress and length. Until recently the correct use of intonations was part of the literary norm and as such was obligatorily taught in all schools. However, after the Second World War it was decided that this requirement was too arduous and was dropped because intonational distinctions had long since disappeared in almost half of the Sln speaking area. Therefore, those interested exclusively in the modern literary language need only the newer system; those interested in Sln from the comparative and/or historical standpoint must rely on the older norm which marks intonations.

Secondly, the system of diacritics for Sln must convey not only prosodic information (as in SC) but also phonological. Modern literary Sln possesses five distinct stressed mid-vowel phonemes but uses only the symbols *e* and *o* for all of them. The letter *e* represents the following: (1) a long high mid vowel similar to *é* in Fr *été* or as *a* in Eng *ate:* traditionally it was marked with a subscript — *ẹ* or *ę* but is now *é* in the new norm; (2) a long and short lower mid vowel between *e* (as

in *bet*) and *a* (as in *bat*); in the old norm, it was left simply without any subscript *e*;[16] in the new norm, it is *ê* or *è*.[17] (3) a short *u* (as in *but*): it is marked as *ə* in both norms.[18]

The letter *o* is used for the following: (1) a long high mid vowel of the type *o* in *dome* which again was marked with either *o̩* or *o̩* but is *ó* in the new norm; (2) a long and short lower mid vowel as *o* in *more* which was indicated simply as *o* — again with no subscript[19] in the old norm but *ô* or *ò*[20] in the new.

In unstressed position, there are only three mid vowels, because the high mid types (*e̩* and *o̩*) do not exist. Only the lower ones (*e* in *bet, o* in *more*) and *ə* occur, and these are represented simply by means of *ə, e* and *o*.

In the old norm, the system of diacritics for mid vowels had to distinguish not only the differences just defined but also their stress, length and intonation. The new norm dropped only the intonations, but nothing else changed. The number of mid vowels remains unchanged; these same differences plus stress and length must still be indicated.

The old norm distinguished the following: three types of stressed vowels with intonations: (1) a long rising marked with ◌́, as *á, é* or *é* etc.; (2) a long falling marked ◌̂ as *â, ê, ô* etc.; (3) a short falling marked as *à, è* or *ȁ;* and (4) one type of unstressed vowel always short and without intonation; these were indicated simply with unmarked symbols — *a, e, ə* etc.

The new norm without intonations distinguishes only two types of stressed vowels. These are: (1) long ones, marked simply as *á, é, í* vs (2) short ones, marked as *à, ò, ə̀*, and (3) as in the old norm, one type of short unstressed vowel; again they are left unmarked — *a, o, ə* etc.

We may now contrast the main features of the old and new norm in the following groups. No. 1 exemplifies the non-mid vowels: *a, i, u* for which *a* may stand for all three. No. 2, the high mid vowels: *e̩* (as *a* in *ate*) and *o̩* (as *o* in *dome*). No. 3, the low mid vowels: *e* (as *e* in *bet*), *o* (as *o* in *more*) and *ə* (as *u* in *but*). No. 4, the unstressed vowels. The old norm examples are all on the right of each statement followed by their equivalent in the new norm.

1. long *á* vs *â* (rising vs falling) now merge into long *á*
   long *â* vs short *à* (both falling) are now long *á* vs short *à*
2. long *é̩* vs *ê̩* (rising vs falling) now merge into long *é* [21]
   long *ó̩* vs *ô̩* (rising vs falling) now merge into long *ó*[21]

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[16] Both *e* or *o* when stressed occur with diacritics as *é, ó, è, ò* but these mark both length and intonational differences. The vowels themselves remain as defined (lower mid).

[17] *ê, ô* vs *è, ò* mark a purely long vs short contrast in the new norm.

[18] Some textbooks, unfortunately, fail to indicate this sound with any special symbol preferring to use *è* and *e* (for stressed and unstressed *ə*).

[19] See footnote 16.

[20] See footnote 17.

[21] The high mid vowels never occur in unstressed position and very rarely as a short vowel. Short *e̩* occurs only before final *j* and short *o̩* before final *w* (spelled *v* or *l*): *imèj* or *nȍv* or simply *imèj, nòv*.

3. long rising[22] *é* and *ó* are now simply long *ê* and *ô*
   short falling *è, ȁ, ò* are still marked *è, ȁ, ò*
4. unstressed *a, i, u, ə, e, o* remain unchanged and unmarked[23]

Most texts and reference works use ◌̀ for the short falling intonation of Sln as shown above, but some use ◌̏. From now on this text will use ◌̏ because it greatly simplifies the presentation. In any event ◌̀ and ◌̏ are interchangeable in Sln examples. See p. 192, footnote 2.

[22] The lower mid vowels very rarely occurred with the long falling intonation. If it did occur, it would be marked simply as *ê* or *ô* — now *ê* or *ô*.

[23] Since high mid vowels (*ę, ǫ*) never occur in unstressed position, the *e, o* in this group refer to the lower type of mid vowel — as *e* in *bet, o* in *more*.

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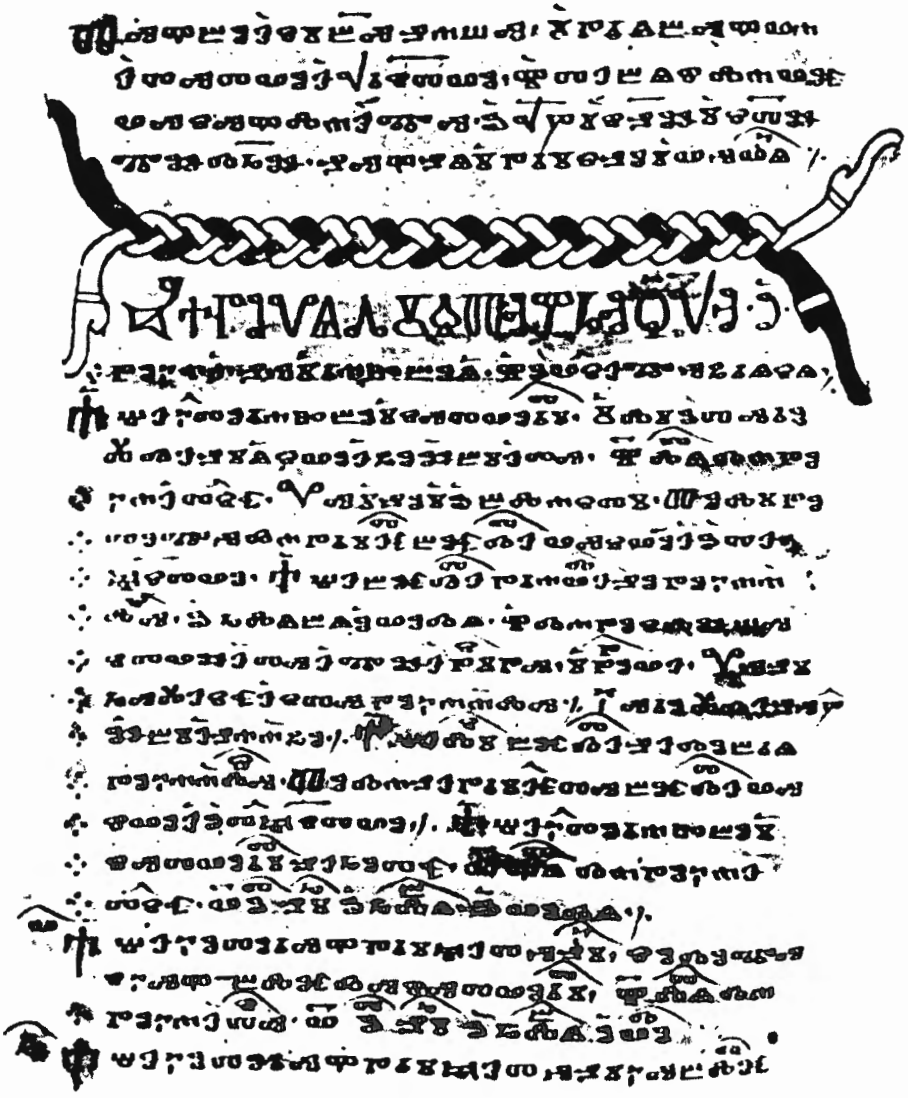

Euchologium Sinaiticum. (XIth century)

A specimen of Glagolitic script (see also p. 224)

CHAPTER III

The Beginnings of Slavic Literacy

The mission of Sts. Cyril and Methodius. The origin of the first Slavic literary language and the personalities involved in this fascinating story have long been the object of extensive and detailed research so that the literature on all facets of the topic has now reached massive proportions. What follows, therefore, must by necessity be limited to those data essential for understanding the sequence of historical events and for appreciating the magnitude of the final achievement.

In 862 a delegation from Prince Rastislav (also spelled Rostislav) of Great Moravia[1] arrived at the court of the Byzantine Emperor Michael III in Constantinople. They requested that the Emperor send to Moravia a Christian mission capable of teaching the Christian faith in the language of the people, that is, in Slavic. Since a cultural link of this sort with Great Moravia also served Byzantium's political and diplomatic interests, the Emperor was only too glad to comply with this request. To make a success of such a venture the Emperor required very capable people, experienced in missionary or diplomatic enterprises, with theological training and a good knowledge of Slavic.

The choice fell upon two brothers, Constantine (better known under his monastic name as St. Cyril) and Methodius, both born and raised in the city of Thessalonika (also Salonika or Saloniki) which in the ninth century was in the heart of a Slavic speaking area of Greece. Both brothers apparently spoke Slavic with full native fluency, indicating that they had learned the language in childhood. This in turn would indicate the extent to which Slavic was spoken within the city itself or as some have speculated that one or both parents were Slavs. Methodius had had administrative experience as a governor of a Slavic speaking province (presumably in the Macedonian region) but later became a monk and subsequently an abbot of a large monastery. Constantine had pursued an academic career receiving an excellent secular as well as theological education, after which he worked as a professor, a private secretary and librarian to the Patriarch of Constantinople, and as a successful diplomat. He also had the reputation of being a gifted linguist.

[1] The exact borders of Great Moravia are, of course, unknown but the vast majority of scholars have traditionally interpreted the existing evidence (both archeological and documentary) so as to place the centre of this state along the lower Morava R in modern Czechoslovakia. A newer and still minority opinion propounded by I. Boba would locate the seat of power of this princedom south of the Danube along the Sava R, around the ancient Roman city of Sirmium (now Sremska Mitrovica) some fifty miles northwest of modern Beograd, Jugoslavia.

In preparation for their task, it was necessary to translate into Slavic certain liturgical texts, prayers, and selected reading from the Gospel. More significant, in order to record any translations, it was necessary to devise an alphabet capable of accurately rendering Slavic sounds. This achievement is traditionally ascribed to St. Cyril; however, the script he developed was not the Cyrillic but an entirely different one, now known as the Glagolitic.[2] The Cyrillic did not come into existence until some thirty years later, after the death of St. Cyril.

In the autumn of 863 the two brothers arrived in Great Moravia and began their missionary work immediately. Their efforts met with immediate success among the common people who were glad to receive "the word" in their own language but with stern opposition from the Frankish clergy who had been evangelizing in the same area for some fifty years or more. This opposition was based on the belief that only Lat, Hebrew and Gr were fit vehicles for divine worship, and that the use of the Slavic vernacular was viewed as a vile sacrilege and dangerous heresy. The Frankish bishops, of course, did not limit this opposition entirely to questions of theology, for they regarded Byzantine missionaries as interlopers who threatened their hitherto unchallenged cultural, political and military hegemony in the area.

In spite of all opposition and hardship, the mission prospered, and three years later the brothers were on the move again. This time they were apparently seeking ordination for themselves to the rank of bishops so that they in turn could ordain their Moravian disciples as priests. They eventually ended up in Rome, but it is not at all clear that this was their original destination. They may have been planning to return home to Constantinople by sea either via Venice or via Rome. In any event, their journey westward took them through Pannonia (now western Hungary but before the coming of the Magyars) which was then the realm of a Slavic ruler, Prince Kocel. The Prince prevailed upon Constantine and Methodius to spend some time at his court, for he was eager to have the two brothers establish a mission within his domain as they had done in Great Moravia, for which purpose he turned over some fifty pupils to the two missionaries for instruction in Slavic literacy and the use of Slavic in divine worship.

After this fortuitous interruption, Constantine and Methodius continued their journey to Venice. The decision to proceed to Rome seems to have been prompted by an invitation from the Pope himself. Since any show of papal approval for their work would be a marvellous counter-balance to all Frankish opposition, the brothers wasted no time in hurrying on to Rome where they arrived in late 867 or early 868. They were warmly received by the newly elected Pope Hadrian II who officially sanctioned the use of Slavic in the liturgy and ordained as priests several of the disciples who had accompanied Constantine and

[2] This is now the opinion of virtually all Slavic scholars, but some doubters still remain. The problems connected with the origin and development of both alphabets will be dealt with on pp. 47-64.

Methodius from Moravia. Approximately a year later,[3] the same pope elevated Methodius to the rank of archbishop with the added dignity of Papal Legate.

Unfortunately, Constantine did not live long enough to see this triumph, for he died in Rome in February 869 (at ca. 42 years of age). Shortly before his death he had become a monk under his more familiar name of Cyril. After his consecration, Methodius set out for his return journey to Great Moravia, but along the way was abducted, tried and imprisoned at the instigation of some Bavarian bishops.

They were enraged because some of the territory assigned to Methodius as an archbishop had until then been under their *de facto* jurisdiction. He languished in detention in a monastery (probably at Ellwangen, Swabia) for some two and a half years until the new pope, John VIII, learned of his plight and secured his release in 873. Three of the bishops involved in this illegal trial were suspended and one, Hermanrich of Passau, was excommunicated.

Even after his return to Great Moravia, Methodius' troubles were not at an end.[4] In his long absence, the political situation had changed radically. Rastislav had been deposed by his nephew Svatopulk who for reasons not fully understood was ill disposed to Methodius personally and the whole concept of a Slavic church. Methodius could, therefore, no longer count on any political support against those elements among the Latin clergy and their supporters who still were unprepared to countenance the presence of any Slavic church in their midst. This opposition was ably led by Wiching, a Frankish priest; he had become a confidant of Prince Svatopulk and was one of his chief advisors. He proved to be an implacable and ruthless foe of the Slavic church and was responsible for many of the intrigues against Methodius.

The opponents of Methodius importuned the Pope with a stream of complaints and accusations chief among which was that Methodius continued to administer the sacraments in Slavic in direct violation of a papal ban. As a matter of fact there seems to have been some sort of restriction, but its exact nature is not known. In any event, in 880 Methodius again journeyed to Rome to defend himself against charges of disobedience and heresy. He was completely vindicated, and the use of Slavic fully sanctioned.[5] John VIII even issued a papal bull, the famous *Industriae tuae,* admonishing Svatopulk to permit the use of Slavic in all

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[3] This long delay was caused not only by Constantine's illness but by the conflicting interests of several major personalities. Prince Kocel wanted a separate bishop for Pannonia, but the Archbishop of Salzburg was determined to control the church in that area. Methodius was finally allotted the titular see of Sirmium (now Sremska Mitrovica) giving him authority over almost all Slavic speaking Christians not yet under the direct authority of Constantinople or Rome itself.

[4] His ally Prince Kocel was killed in war with the Franks in 874 and the church in Pannonia came under the control of Salzburg. It is not known what became of St. Cyril's and Methodius' former pupils.

[5] John VIII's decisions in 880 make it very doubtful whether he had ever totally banned the use of Slavic in the recent past. It would be a complete repudiation of his own policy. Further if

the churches of his realm so long as it did displace Lat. However, in order to placate the pro-Latin faction, the Pope consecrated Wiching Latin bishop of Nitra as Svatopulk had requested.

During the next five years Methodius is allowed to live and work in relative peace, but when he finally died in 885 (at ca. 70 years of age), the young Slavic church was deprived of its only prestigious protector. Wiching was then automatically the highest ranking church dignitary in the region and could use his authority to do pretty much as he pleased. He hurried to Rome where he presented the newly elected Pope Stephan V with a series of false documents supposedly written by previous popes. On the basis of these forgeries, Wiching persuaded the new and uninformed Pope to prohibit the use of Slavic and to make the Slavic church in Moravia a normal Latin church. Wiching then wasted no time putting these new rules into effect. The Slavic liturgy was banned, and the disciples of Methodius were either imprisoned, sold into slavery or hounded out of the country.[6] Those who could escape scattered in all directions — some to Bohemia, some to Dalmatia, but the majority found refuge in Bulgaria which had become officially Christian with the baptism of Emperor Boris in 864. Later Boris was to make good use of these well trained refugees when he introduced Slavic (in place of Gr) as the official language of church and state. One group was established in the far west of the Bulgarian Empire, principally in the Lake Ohrid region; another went to work in the capital, first Pliska — later Preslav in the east. The western groups continued to use the original Glagolitic alphabet, but the eastern very shortly thereafter developed the Cyrillic script.

The linguistic significance of Sts. Cyril and Methodius' work. The language used and developed by the two Slavic apostles is known in Eng as Old Church Slavic or Slavonic (hereinafter OCS). Most Slavic nations use the equivalent of "Old Slavic". For example, in Russian the term is *staroslavjanskij jazyk*; in Ukr, *staroslovjans'ka mova*; in Cz, *jazyk staroslověnský;* in P, *język starosłowiański* and *staro-cerkiewno-słowiański*. The Russians themselves before 1918 used the designation *drevnecerkovnoslavjanskij*, but the rejection of the reference to "church" is not entirely due to political considerations, for the Czechs used the term *staroslověnský* long before 1948. In French, on the other hand, where politics is not a factor, *le vieux slave* is the standard usage whereas the Germans consistently use *altkirchenslavisch*. The Bulgarians, for reasons not entirely na-

such a ban had existed, Methodius was obviously guilty of disobeying it; yet he was cleared of all such charges. On the other hand, in 879 the Pope wrote a letter to Methodius accusing him of celebrating in Slavic although forbidden to do so. Obviously there was some sort of ban, but it must have been of a very limited nature or had been issued on the basis of false information.

[6] It is interesting to note that in 893 Wiching himself fled from Moravia to Bavaria where he became the chancellor of Prince Arnulf, was elevated to the see of Passau (899) but was deposed from his bishopric by the Archbishop of Salzburg and thereafter disappears from history.

tionalistic, prefer to use *starobŭlgarski ezik*. In spite of the profusion of names, they all refer to the same language — the oldest attested form of Slavic. However, this fact gives rise to a very common misconception.

Because OCS is the oldest attested form of Slavic at our disposal, it is often confused with the parent-language from which all modern Slavic languages originated. OCS itself was merely a dialect of this parent-language, that is, of Proto-Slavic, for PSl as a unified language without dialectal differences had ceased to exist some three centuries before St. Cyril and Methodius set to work. Slavic speech was already divided into dialects by the ninth century, but these dialectal differences had apparently not yet reached a point where mutual intelligibility was impaired.

This applies, at least, to the type of Slavic spoken in Moravia and that spoken in southern Bulgaria-Macedonia. The delegates from Great Moravia asked the Emperor Michael III to supply them with Slavic speaking teachers. The Emperor could obtain such teachers only from among his own Slavic speaking subjects. The fact that these latter spoke dialects differing from those spoken in Moravia did not trouble the Moravian delegates. They knew that their subjects would have no great difficulty understanding teachers from the Bulgarian-Macedonian area. This being the case, there was nothing to prevent the brothers from using their own dialect of Slavic from the Salonican region. However, this perception gives rise to another misconception about OCS.

It is wrong to think of this language as merely some ancient type of southeastern Macedonian preserved in written form. It is logical to assume that St. Cyril would have used this dialect if he had done extensive translating before going to Moravia, but there is no firm evidence for this. Even if such translations had existed, there is no reason to believe that St. Cyril and Methodius would not have altered them to conform to the local dialects of Moravia and Pannonia. The evidence indicates rather that the majority, if not all, of these translations were done after the missionaries reached Great Moravia. It is impossible to believe that the Slavic dialect spoken there did not influence the language of the translations. After all, the point of the entire enterprise was to preach and teach in the language of the people. What is more, the students trained by St. Cyril and Methodius were local people accustomed to speaking their own dialect. They could hardly have been able to imitate the dialect of their prestigious teachers in all respects as, for example, in copying the translations of their masters. The two apostles very probably adjusted their language to make it more acceptable to the local population. The very same considerations apply equally to all the mission fields in which St. Cyril and Methodius found themselves, that is, to Moravia and Pannonia and also to the new dialectal situations in which the disciples of St. Cyril and Methodius worked after the collapse of the Moravian church, that is, in the Ohrid region of western Macedonia and Pliska—Preslav area in the northeast part of the Bulgarian empire.

The nature of the documentation for OCS. We possess no documents whatsoever from the pre-Moravian period, likely for the very simple reason that no translations, at least of a major nature, had been done in this period. The oldest document in our possession, known as the *Kievan Leaves* or *Fragments,*[7] is quite definitely connected with the Moravian or Pannonian periods. However, it may stem directly from this time or region but could be a later copy from another region. With this one possible exception all extant documents originate from the final period. This means that they arose after the collapse of the Great Moravian mission when the work was continued by the disciples of St. Cyril and Methodius in the various areas where they found refuge. Given these facts, none of them could have arisen any sooner than in the very late ninth or early tenth centuries, that is, at least fifty or sixty years after St. Cyril and Methodius began their work, but even this estimate is somewhat too short. It is more likely that even the oldest documents in our possession arose some eighty to one hundred years after the beginning of the mission. Three major documents (including the *Kievan Leaves*) stem from this period (mid tenth to early eleventh century), but the vast majority were copied in the eleventh, that is, approximately a full two hundred years after St. Cyril and Methodius' time.

Not only are the extant documents far removed from the Slavic apostles chronologically but also geographically. Practically all of them arose either in western Macedonia (in the Lake Ohrid region) or northeastern Bulgaria (Preslav, the ancient capital). The Macedonian group which constitutes the majority is written in Glagolitic and exhibits features somewhat more archaic than the eastern Bulgarian group which is written in Cyrillic. When the refugees from Great Moravia sought asylum in Bulgaria, the Emperor Boris had them continue their activities in these two areas for reasons that had nothing to do with linguistics. Thus, it came about that our knowledge of OCS is based exclusively on documents originating in areas which did not speak the native dialect of St. Cyril and Methodius nor the dialect of any of the regions in which they worked. The leadership among these refugees would for the most part have been Moravians, pupils and disciples of St. Cyril and Methodius, but some of the translators and scribes and all new disciples would have been local people. Given all those circumstances the dialects of Ohrid and Preslav regions could hardly have failed to exert an influence on the reproduction of OCS manuscripts. A list and description of these texts plus the history of each can be found in most handbooks

[7] The document itself was found somewhere in the Near East (Jerusalem, Mount Sinai) by a Russian Orthodox abbot, brought to Kiev and donated to the Theological Seminary there in 1872. It is written in Glagolitic on seven folia (that is, fourteen pages of parchment) measuring approximately 4½" x 5¾", containing part of a Roman Catholic mass translated from Latin.

or grammars of OCS,[8] and need not be repeated here, but a few words of general information should be said about them.

As one would expect, the content of these documents is exclusively religious: prayers, rituals, sermons, lives of Saints, translations of the Bible, etc. Therefore, vocabulary touching other aspects of life and culture is absent. In all other respects they differ from each other very markedly. Even in size they range from a single sheet to 288 sheets of parchment,[9] and in format the largest measures approximately 8'' x 11'' and the smallest about half that size.

The vast majority of our documents, logically enough, were found in monastery libraries although one had been preserved in the private collection of a noble family on the Island of Krk (Veglia). Some were found in or near their place of origin, but most of the OCS texts had been carried far afield by wandering churchmen to various monasteries all over the Orthodox world to such divers places as Jerusalem, Mt. Athos, Mt. Sinai and Supraśl (northeastern Poland). Given this fact, how then are we to know where any given document was written? Although the science of paleography can be of some help, we must rely very heavily on dialectal features within the document itself — linguistic clues pointing to a specific region.

Almost all of these OCS texts came to light only in the mid or late nineteenth century and were studied linguistically for the first time during the same period. Even the one significant document known in the eighteenth century, *The Codex Assemanianus* (in the Vatican Library since 1736) was not studied until the early nineteenth. Research on these documents continues, of course, to this day, but our knowledge of OCS in all its essential features is a product of late nineteenth and early twentieth century scholarship. This is the language described in all of today's handbooks.

Since our documents arose at different times and in different places, and are written in two alphabets, the language in them can hardly be expected to be uniform. Therefore, the OCS as presented in the modern handbooks and dictionaries had to be standardized in both grammar and spelling. This unity is achieved by using only the most archaic form of all attested variants or by reconstructing proto-forms on the basis of comparative linguistics. It is also traditional to print all OCS textbooks in either Cyrillic or Latin transliteration in spite of the fact that most of the documents were written in Glagolitic since the latter is too difficult for learning or publishing. The original diversity becomes evident only when we compare the same passage occurring in several documents.

Anyone seeing a list of these documents for the first time is usually surprised

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[8] For English speaking students the best references in this regard are H. Lunt, *Old Church Slavonic Grammar*. Gravenhage, 1959, pp. 6-8, or R. Picchio, "Church Slavonic", *The Slavic Literary Languages*. New Haven, 1980, pp. 13-16.

[9] A parchment sheet is known as a *folio* (plural *folia* or *folios*). Because of expense both sides of a folio would be used. Thus, a 200-folia manuscript is equivalent to a 400-page book.

to discover how few of them there really are. In essence, there are only seven major Glagolitic texts and two Cyrillic ones. A third Cyrillic text was discovered as recently as 1960 (in Enina near Kazanlâk, Bulgaria) but added little to our existing knowledge. This is the minimum of canonical texts which all scholars acknowledge and on which our knowledge of OCS is based. In addition to this core, the so-called canon, there are several other disputed or neglected texts (perhaps seven or eight). Sometimes a given document is ignored by some writers simply because it is too short (one or two parchment folia) or too damaged to add anything to our knowledge. Sometimes the text in question is too regional; that is, it clearly originated in an area beyond "traditional OCS territory" (not from Moravia, the Ohrid or Preslav regions). However, the main reason for this paucity of OCS texts is because the period of time in which they could have arisen is relatively short. No texts later than the end of the eleventh century are accepted into the canon. This date is considered the cut-off point because by the end of the eleventh century, the spoken language had changed to such an extent that the written form no longer reflected the spoken. In other words, the written language lost its living base and became an entirely artificial one. The scribes, however, continued to maintain or, more precisely, tried to maintain the older norms in spelling and grammar. No longer was the goal to write a refined version of the spoken language but to part company with the spoken language and to write as St. Cyril, Methodius and their immediate disciples used to speak. This, of course, proved impossible, for the influence of the spoken language was too all pervasive. Spoken features inevitably kept creeping into the text.

The Old Church Slavic tradition after the Classical Age. Given the conditions described above, a new type of language began to evolve, a form of compromise in which most of the essential features of OCS were retained but certain characteristics of the spoken language were also incorporated. However, by this time the spoken language itself differed markedly from region to region. Therefore, this new compromise-language took on different forms in every area where OCS had been known. This new type of literary-liturgical language is known simply as Church Slavic (as opposed to OCS) and its regional variants as recensions. These recensions are the following: (1) Bulgaro-Macedonian, (2) Serbian, (3) East Slavic with subsequent divisions into Russian and Ukrainian—Belorussian, (4) Croatian Glagolitic, (5) Czech or Bohemian Glagolitic.

Note that only (4) and (5) were used by Catholics; all the rest — by Orthodox Slavs. (1) - (3) were also used at various times and places by Orthodox Rumanians.

The Cz recension was a rather short-lived but very interesting phenomenon. The use of OCS was brought to Bohemia by refugees from Great Moravia after the death of Methodius (885 AD) and survived there until 1097 when the last group of monks using the Slavonic liturgy were expelled from their monastery in Sazava. There was a brief revival of this tradition in the second half of the fourteenth century when the Emperor Karol (also known as Charles) IV invited some

Croatian monks, familiar with the Croatian Glagolitic tradition, to Prague to reestablish the Slavic liturgy and to cultivate Church Slavic literature in, at least, one monastery in his kingdom. This experiment lasted for only some fifty years but was very productive. All the other recensions have long intricate histories which for some last up to the present day.

Before the advent of printing, there was little or no change for standardization of any of these recensions. All Slavic groups continued to copy old manuscripts and produce new ones maintaining the older largely forgotten norms to the best of their ability and knowledge, but the influence of the spoken language was too great. Therefore, texts from this period (beginning with the twelfth century) are permeated with local features, especially documents of a secular nature where nothing sacred was involved. Thus, there is great variation in documents; some are very close to the colloquial language of a given area; others are very close to the standards of classical OCS, particularly in those instances when there existed a proto-type (as with Bible translations) stemming from the days of St. Cyril and Methodius.

However, it is a mistake to interpret this linguistic situation in a modern framework. The scribes who incorporated features of their own dialect into any given text were not trying to create a national language for their own people nor were they trying to elevate their own dialect to the status of a literary language. This was the preoccupation in the age of national awakening and nationalism (largely in the eighteenth and nineteenth centuries), but not in the Middle Ages. There is no evidence leading us to regard these local features in the documents as anything other than honest mistakes committed either through ignorance or carelessness but certainly not as a conscious manifestation of national pride in one's own language. Further, it is a mistake to think that each group of Slavs regarded its own recension of Church Slavic as some sort of national treasure as is the case now. On the contrary, medieval Orthodox churchmen were appalled by the linguistic chaos in the divine texts. They strove rather to unify the recensions, not to develop them into distinct national literary languages or to bring them closer to the spoken language of the people. Their desire was rather for unity in faith and doctrine expressed in a common unified language. This desire for standardization is a constant theme in the history of Church Slavic.

The first major attempt at reform is attributed to Euthymius[10] (or Evtimej), patriarch of Tŭrnovo, Bulgaria, from 1375-93. His aim was not necessarily to restore the language to the pristine purity of St. Cyril's and Methodius' times but to restore order. He was able to attain a high degree of standardization in spelling and grammar and to revive some archaic forms which had fallen into disuse. His reforms were readily imitated by other Orthodox Slavs, for Bulgaria as the homeland of the Slavic apostles was regarded as the bastion of their tradition and

[10] He was also the last patriarch of an independent Bulgaria before the Turkish conquest in 1393.

the model to follow in these matters. Euthymius's reforms and their effects especially in the East Slavic area are known as the "Second South Slavic (or Bulgarian) influence;" (the first S Sl influence occurred when Orthodox Christianity along with OCS from Bulgaria was first introduced into the Kievan State). His reforms tended to Bulgarianize the E Sl recension in many respects.

The next major events in the history of CS occurred in the late sixteenth and early seventeenth centuries in the Ukrainian speaking areas of the Grand Duchy of Lithuania and the Kingdom of Poland which at the time were in intellectual ferment because of the Reformation and the Catholic and Orthodox reaction to it. In the field of linguistics this was a particularly productive period, for Protestants of every stripe fervently believed that every Christian must have access to the Word of God in his own tongue. They approached the task of preparing catechisms and translating the Bible into the vernacular with such zeal that both Catholic and Orthodox intellectuals were forced to produce similar material for their own believers in order to prevent the spread of Protestantism.

The extent of this activity can best be understood by considering the following. Between the years 1551 and 1632 there were printed five Polish editions of the entire Bible (two of which were Catholic) and nine separate editions of the New Testament alone (only three of which were Catholic). On the other hand, this linguistic activity took a somewhat different turn among Belorussian and Ukrainian speaking Orthodox believers who had always had access to the Bible in Church Slavonic which was not entirely a foreign language, as was Lat for Polish speakers. Therefore, instead of translations in the strict sense, we get rather adaptations or reworkings of the existing Church Slavic Bible with various elements of sixteenth century Br or Ukr incorporated into the text. Sometimes the resulting document was very close to the spoken language with only a few remnants of Church Slavic, as in the famous Gospel of Peresopnycja (1556-61); in others, the language remained essentially Church Slavic with only a sprinkling of native elements. Nevertheless, this type of "translation" or adaptation seems to have been very much in demand. From a fairly typical twenty-year period (1552-72) we know of, at least, 16 manuscripts from the western and northwestern Ukraine alone whose authors attempted to bring the language, usually of the Gospels (but sometimes other books of the Bible), closer to that spoken by the people.[11]

This trend toward an ever increasing and prestigeous role for the vernacular in religious life was often accepted even by those who otherwise rejected all other facets of Protestant theology. Therefore, if this point of view were to gain wide ac-

[11] In point of fact this type of quasi-translation from Church Slavic had been known in the region since the early XVI century. Dr. F. Skoryna (from Polock, Br) published in Prague (1517-19) 22 books of the Old Testament in a type of Belorussianized CS. Later in Vilnius, 1525, he published material in CS but with marginal notes in spoken Br explaining unknown CS words. Two of the above mentioned 16 Ukr manuscripts are merely reworkings of Skoryna's publications brought closer to the spoken language by discarding certain Belorussianisms and incorporating more Ukrainianisms.

ceptance among Orthodox believers, it would threaten the sacred status of Church Slavic. As a result, those who favored retaining the ancient liturgical language were forced to counter this threat to tradition by standardizing the grammar and orthography of Church Slavic and by producing a printed version of the Bible in the language. With this view in mind, Prince Constantine Ostroz'kyj, a wealthy landowner and devout Orthodox believer, assembled a group of scholars at his estate in Ostroh (or Ostrih), Volhynia (near Rovno in northwestern Ukraine) and set them the task of publishing the entire Bible in Church Slavic. These scholars gathered together the oldest texts available, compared these with the Greek originals and published the desired Bible in 1581. The language, of course, was the E Sl recension of Church Slavic. It was republished in Moscow in 1663 with some minor changes and corrections and again in St. Petersburg (now Leningrad) in 1751 and 1756, each time with more substantial changes. These changes did not essentially change the language of the 1581-edition, for the correctors were more concerned with making the text correspond more accurately to the original Gr, than with linguistic problems. This is the version of the Bible still used by all these churches, whether Orthodox or Greek Catholic,[12] that still make any use of Church Slavic.

In 1619 in Jevje (near Vilno), there appeared a very comprehensive grammar of Church Slavic which was to remain in use right down to the nineteenth century. Its author was Meletij Smotryc'kyj, born in 1577(-9?) in the village of Smotryč in southwestern Ukraine (some twenty miles north of the city of Kamjanec'-Podil's'kyj). It is quite obvious that the language of the famous Bible of 1581 formed the basis for this grammar, for Smotryc'kyj had studied in the Ostrih Academy; his father had helped prepare the famous Bible, and after his father's death he was under the personal patronage of Prince Constantine. Smotryc'kyj's grammar of 1619 produced many descendents, imitators and spin-offs, the pedigrees of which are complicated and often interrelated. It was first reprinted in 1648 in Moscow without any reference to the author but with many changes which brought the language closer to the norms used in Muscovy. In 1697, in the Snagov monastery, Wallachia (now southern Rumania) the original of 1619 was reprinted again without reference to the author but with very minor changes. After that another edition with changes and corrections was prepared in Moscow in 1721. This same version was reprinted almost word for word in 1755 mainly for the use of Orthodox Serbs, but it was also widely used by Orthodox Rumanians and Bulgarians. However, manuscript copies of Smotryc'kyj are also attested in the Rumanian-Bulgarian area as early as 1655.

Smotryc'kyj's norms were also accepted by both the Ukrainian Greek Catholics and by those Roman Catholic Croatians in Dalmatia who still used

[12] This should not cause any surprise, for the Greek Catholic Church in Ukraine came into existence in 1596 by the Union of Brest. Certain Orthodox bishops accepted union with Rome but retained all existing Orthodox practices after the new version of the Bible had become part of the Orthodox tradition.

Church Slavic (written in Glagolitic).[13] This latter group for over two centuries almost completely abandoned their own Croatian recension in favor of the new E Sl version but returned to their own purely Croatian recension only in the late nineteenth century.

It is also from this same time that we get our first dictionaries of Church Slavic. The earliest was published by L. Zyzanij, in Vilnius, 1596 but containing only 1061 entries was not widely used. The next, containing some 7000 entries, was compiled by P. Berynda and published in Kiev, 1627. Both authors were Western Ukrainians (the precise birthplaces are still debated) and used a type of language very close to their native dialect in explaining the Church Slavic words cited in their dictionaries. Therefore, they could not be as widely used by other Slavic speakers as could the Bible of Ostroh or Smotryc'kyj's grammar. Berynda's dictionary was, nevertheless, extensively used in the East Slavic area (republished in 1653) and his fund of Church Slavic words formed the basis for many later dictionaries as, for example, a *Latin-Church Slavonic Lexicon* (1642), a *Church Slavonic-Latin Lexicon* (1649) and a *Church Slavonic-Romanian Dictionary* (1649). Thus, Berynda's spellings gained widespread acceptance and helped in the final standardization of Church Slavic.

By the end of the eighteenth century, the newly codified E Sl recension of Church Slavic was triumphant virtually everywhere for a variety of reasons which can be only briefly mentioned here. Firstly, there was the long-standing and genuine desire for unity, order and standardization in the divine texts. After all, order, whatever its origin, is preferable to chaos. Secondly, the Orthodox Slavs and Rumanians of the Balkans were prepared to accept the leadership of those Orthodox Christians who had presumably preserved the faith in its purest form by escaping Turkish domination. Thirdly, Muscovy at the time of Prince Constantine and Smotryc'kyj was a power on the rise but was still isolated and too backward in intellectual matters to take the leadership in this field. The Orthodox Church of Muscovy, therefore, accepted the new Bible and grammar in all but a few nonessential details. In this way, these reforms became an integral part of the Russian Orthodox Church which was to enjoy ever increasing prestige as Muscovy grew to become Imperial Russia, the only independent Orthodox power on earth. This fact tended to endow the patriarch of Moscow (later the Holy Synod) with somewhat the same leadership role enjoyed by the patriarch of Constantinople before the Turkish conquest. Finally, in an age before nationalism, there was a greater loyalty to one's faith than to either nationality or local language, and the language of St. Cyril and Methodius was supranational, not the property of one group but of all Orthodox Slavs. People felt that they were purifying this language not adopting one regional variant of it. In fact, it must be emphasized that there was at the time no evidence to contradict this belief. The canonical texts of OCS

[13] This acceptance was likely made easier by the fact that Smotryc'kyj himself converted to Greek Catholicism shortly before his death.

even if known had not yet been studied linguistically. No one was yet aware that there had ever existed another older form of language now known as OCS which is much nearer to that actually spoken by St. Cyril and Methodius. The concept of OCS as opposed to Church Slavic was a thing of the future.

Church Slavic in the Modern Age. During the period of national awakening, many came to view Church Slavonic in an entirely new, somewhat negative light. Whereas previously it had enjoyed the status of being sublime and supranational, now it was rejected for precisely the same reasons, for the new nationalism and romanticism sought a purely native literary language that sprung from the common people. Church Slavic was under attack not only for these new ideological reasons but also for very practical educational considerations. Church Slavic was a perfectly serviceable medium for religious matters, but it lacked the vocabulary for describing modern concepts, especially scientific ones. If even a minimal level of education was to be attained in anything other than catechism, then a more flexible up-to-date language was necessary. The need for such a modern literary language was felt by the more enlightened leadership among all the Orthodox and Greek Catholic Slavs, but hot debate raged over the role of Church Slavonic in the formation of any new literary language. The course of this debate, its duration, intensity and final resolution is, of course, very different for each of the nationalities concerned, but the controversy over this issue is a common theme everywhere.

Many, especially the clergy whose leadership role was so vital in these societies, could simply not conceive of a literary language which completely excluded Church Slavic. For such people, a literary language based exclusively on the living dialects was unthinkable.[14] It would lack dignity, would have no connection with the past and would be a denial of one's own cultural and religious heritage. This point of view gave rise to many attempts at linguistic compromise — some Church Slavic plus some features of the spoken language again with long debates over how much of each component should contribute to the mix. Of course, there is nothing inherently unworkable about this type of compromise, nor is there anything inherently wrong with wanting to preserve tradition. After all, modern literary R is a perfect example of just such a compromise. The point is that the long debates and indecision over the role of Church Slavic vs that of the spoken dialects hindered the development of new literary languages among all those with a Church Slavic tradition.

Once the debates were over, and the new literary languages (that is R, Ukr, Br, Sr, Blg and later M) had become established and generally accepted, then the role of Church Slavonic shrank even further. It became a purely liturgical and ritualistic language. At the present time it is still used only by the Russian, Serbian and Bulgarian Orthodox Churches. The various Greek Catholic administrations

[14] It should be mentioned that those favoring a literary language based on the "language of people" were themselves often plagued with controversy over such questions as which dialect or dialects should be the basis, and if several then which features of each.

switched to the vernacular at the same time as the Roman Catholics abandoned Lat (that is, after the reforms of Vatican II).

Glagolitic: the original OCS alphabet. Before either Sts. Cyril or Methodius could attempt any translations, it was absolutely necessary to devise an alphabet capable of accurately rendering Slavic sounds. This achievement is generally attributed to St. Cyril, and we have no solid grounds to doubt this time-honoured tradition.

The major difficulty here is that we have not one but two distinct alphabets connected with St. Cyril and Methodius' mission. These are the Glagolitic, which for all practical purposes has gone out of use, and the Cyrillic from which are derived all the modern Cyrillic alphabets. For this reason, there has been considerable controversy whether both alphabets or only one of them should be attributed to St. Cyril. If only one of the alphabets is his invention, then which one? Although some doubt may still remain, it is, nevertheless, virtually the unanimous opinion of contemporary scholars that the alphabet directly connected with St. Cyril is the Glagolitic and that the Cyrillic arose later (end of the ninth century). This means that the Cyrillic script is so named not because St. Cyril actually invented it but in his honour or because of a false tradition attributing it to him.

On the other hand, there is less agreement when it comes to defining St. Cyril's role in the development of this alphabet. One group of scholars (a minority) believes that his role is limited to that of systematizing or perfecting an existing Slavic alphabet. That is to say, even before (possibly long before) the Cyrillo-Methodian mission, the Slavs had developed a purely indigenous writing system, the symbols of which were very similar to those of the Glagolitic although the system itself may have been less accurate. St. Cyril presumably became acquainted with this script in the Kherson region[15] on the Black Sea while on a diplomatic mission to the Khazars for the Byzantine Emperor, and later merely refined this alleged proto-Glagolitic in order to produce the historically attested Glagolitic.

The evidence for this belief is based mainly on an enigmatic quotation from the *Life of St. Cyril* (Chapter VIII) where it relates that while in Kherson "... he found there a gospel and psalter written in Rus' letters and a man speaking that language and having spoken with him and having grasped the sense of his speech distinguished the vocalic and consonantal symbols and soon began to read." In the original the phrase *Rus' letters* is rendered *rosьsky pismeny* (an instrumental plural). The key word here, of course, is *rosьsky* in which we readily recognize the same root that came to designate the first Kievan state and its inhabitants, East Slavs in general and later Russians in particular. If *rosь* (or *rusь*) means *Slavic* here, then the implications seem, at first glance, abundantly clear. By the mid ninth century AD, the proto-East Slavs had a writing system of their own and

[15] Kherson here does not refer to the modern Kherson, situated at the mouth of the Dnipro but to Khersones, an ancient Greek settlement, on the southwestern tip of the Crimean Peninsula, just west of modern Sevastopol. It is also known as Korsun.

translations of the psalms and Gospel into their own dialect. The vast majority of scholars, however, reject this explanation for the following considerations:

1. The *Life of St. Cyril* was composed shortly after St. Cyril's death (869 AD) but the oldest copy in our possession stems from the mid fifteenth century. During some six hundred years of copying many a mistake or distortion can occur.
2. The term *rosъ* or *rusъ* is by no means used exclusively in referring to East Slavs. In the ninth and tenth centuries this term more often than not referred to a ruling class of Scandinavian origin, also known historically as Varangians.
3. There is not a single bit of tangible evidence of writing among the Slavs prior to Cyrillo-Methodian mission to Moravia. As yet no document of any sort, not even the shortest inscription has ever been found.
4. In view of the previous point, it is all the more puzzling that a people still overwhelmingly non-Christian would produce translations of Christian literature and no other bit of writing.
5. Even if one argues that the attainment of literacy was limited to a small group of Christians, it is indeed strange that the existence of such a culturally advanced Christian community would so completely escape the notice of all Christian historians.

If St. Cyril did not see something written in Slavic in Kherson, what then did he find there? In view of point No. 2, could the material have been written in some sort of Old Norse? The existence of a pre-Christian Scandinavian writing system (called the *runes*) is a well-known historical fact. Hundreds of runic inscriptions have been found all over Norway, Denmark and Sweden, but runic manuscripts are rare and later, and there is no evidence whatsoever for any Biblical translations in this script. Moreover, St. Cyril knew no Germanic languages. Some have suggested that he saw something written in Gothic. A Biblical translations in Gothic had existed since the fourth century, and a Gothic speaking enclave continued to exist in the Crimea down to the fourteenth century. However, the Goths evangelized in the fourth century and the Crimean Goths belong to different branches of Christianity. It is questionable whether the latter group would have even known about, much less had access to the Biblical translations of the first. In any event, as stated, St. Cyril had no knowledge of any Germanic language. Finally, the words for *Goth* and *rosъ* are so different in both Gr and Slavic that it is hardly conceivable that any later copyist could have confused them.

Nevertheless, it is now the opinion of an ever growing body of scholars that the whole mystery can best be explained by assuming a simple scribal error. The confusion arose between *rosъsky* (or *rusъsky*) vs *sorъsky* (or *surъsky*) meaning Syrian or Syriac. The transposition of *s* and *r* could quite easily arise as a mere slip of the pen or as a deliberate change on the part of a copyist who had no knowledge of the Syrians or Syriac language. Upon encountering a form like *surъsky*, which was

quite unfamiliar to him, he "corrected" it with the more familiar *rusьsky* assuming that a previous scribe had made a mistake. Even more convincing is the fact that reinstating the lost form *sorьsky* makes the above cited passage perfectly intelligible for the following reasons:

1. There is no question about the existence of Syriac translations of Bible in the mid ninth century.

2. It is certainly quite possible that a Syriac speaking Christian, perhaps a merchant, could be in Kherson, a major Black Sea trading centre. The Syriac speaking area of the Near East (modern Syria and parts of Iran and Jordan) were not far away but had been under Moslem rule for some two centuries at that time. Therefore, it is all the more likely that individual Syrians if not whole communities would find there way to Byzantine territory.

3. Immediately before the passage quoted, it is related how St. Cyril had been devoting himself to the study of Hebrew. Then it relates how he happened upon a man with Samaritan books which he was able to read after some deliberation. Again there is no great difficulty here, for anyone with a knowledge of Hebrew should be able to read Samaritan if he has a bit of time to master a different alphabet. Immediately thereafter we come to the passage about *rosьsky pismeny* which we have now corrected to read as *Syriac letters.* Thus, we have three closely related Semitic languages mentioned in the same passage.

4. Like all Semitic scripts, the Syriac alphabet was purely consonantal. Vowels were simply not written at all or were indicated by variety of systems with dots or tiny Greek vowels above and below the consonantal symbols. St. Cyril may have studied Syriac independently, for it was then a major Christian language or he may have relied on his knowledge of Hebrew to read Syriac. In either case, he could have encountered a familiar language but with a different system for marking vowels or with the vowels unmarked. Thus, the reference to "distinguishing the vocalic and consonantal symbols" makes perfect sense.

5. In addition to reproducing full-length copies of the *Life of Constantine,* and of the other Saints, it was customary to compile condensed versions of them, called "prologs". The oldest Prolog of the *Life of Constantine* happens to be over a full century older than the oldest full-length copy. It states that St. Cyril knew Syriac, a detail not mentioned in the full-length version. Where would the compiler of the Prolog have obtained this information if not from the full-length version before it was obliterated by the change of *surьsky* to *rusьsky*?

6. Finally, the confusion of these two forms is by no means limited to this one document; it is attested elsewhere.[16]

Those who remain unconvinced and still insist that *rusь, rusьsky* refers plainly and simply to Slavs must read on in the very same document from which they

[16] T. A. Ivanova (1969) documents this confusion. She also reports (p. 72) that a questionnaire circulated at the V Congress of Slavists, Sofia, 1963 discovered only one scholar who believed that the passage in Chapter VIII refers to Slavic writing.

draw their sole piece of evidence. In the *Life of St. Cyril* (Chapter XIV) we read how the Emperor Michael III prevailed upon Constantine to accept the leadership in the arduous mission to Great Moravia. Constantine answered, "Although I am tired and sick in body, I will go there gladly if they have letters for their language." The Emperor replied, "My grandfather and father and many others have searched for some but have not been able to find any." It is difficult to imagine an exchange like this if Constantine had in fact discovered some sort of Slavic alphabet less than two years earlier. If, as the Emperor revealed, the Byzantine authorities had been attempting to discover some type of Slavic writing, why would Constantine conceal the fact that he had presumably discovered Slavic books in Kherson? Hiding this fact makes no sense unless we conclude that he intended to pass off this alphabet as his own invention and thus gain an undeserved place in history. Moreover, Constantine could risk this deception only if he knew ahead of time that the Kherson-type of writing was doomed to disappear without trace not only in the distant future but almost immediately before anyone brought it to the Emperor's attention. Finally, if the Byzantine court with all the diplomatic resources at its disposal was unable to find any type of Slavic writing after a search extending over two generations, this is fairly convincing evidence that there was no Slavic writing to be found.

The origin of the Cyrillic alphabet. When the refugees from Moravia arrived in Bulgaria, the Emperor Boris set some of them to work in the capital (first in Pliska, later in Preslav) in the eastern part of the empire. One prominent figure in this group was a certain Constantine. He may have been an original disciple of St. Cyril and Methodius, that is, one of the refugees, or he may have joined them shortly after their arrival in Bulgaria. In any event, he became famous for his literary activity mainly in the field of translating but also contributed some original works. He was later appointed Bishop of Preslav and, thus, became the first Slavic bishop of the Bulgarian Church. In order to distinguish him from the more famous Constantine or St. Cyril, this younger Constantine is referred to in historical works as Constantine the Priest or Presbyter or as Constantine of Preslav.

One achievement attributed to him is a translation from Gr of a work known as an *Outline of History* or an *Abridged Chronology* compiled by the Patriarch Nikephoros. It listed the major events mentioned in the Bible and in the history of the Christian Church and attempted to calculate the number of years separating these events, to which Constantine also added some original data regarding the history of Christianity in Bulgaria. In one passage he stated: "...it is thirty years from the baptism of the Bulgarians until the *prěloženьje kъnigъ*." The baptism of the Bulgarians refers to the baptism of the Emperor Boris and his official acceptance of Christianity as the state religion for Bulgaria in 864. However, we are not so certain about what is meant by the phrase *prěloženьje kъnigъ*. At first glance it would seem to refer to the completion of some major translation project, but if

this were the case, we would expect more precision: the translated works would surely be named. Only the books of the Bible are so fundamental to Christianity that they could be referred to simply as "the books" without any further explanation. However, as far as can be determined, the Bible had already been translated by St. Cyril and Methodius, and there is no evidence pointing to a retranslation or revision of these texts ca. 894.

However, the term *prěloženьje* does not always refer to translating; it can also mean simply a transfer or shifting from one place to another or more abstractly a transformation or change over from one form to another. Since there is no evidence whatsoever that Constantine is referring here to some sort of massive relocation of books, it is much more sensible to assume that he is using the word in the other sense. He is referring to some sort of transformation in the books themselves — possibly in the way in which they were written, that is, a change in the writing system. This interpretation is strengthened by the fact that originally the word *kъniga* was not used exclusively in the modern meaning "book, written document" but also in the sense "alphabetic symbol, letter". This being the case, then the phrase in question most likely refers to an exchange of alphabets, a transformation in the letters used to write OCS. This interpretation is the one now accepted by the vast majority of Slavic scholars.

If Constantine was referring to the substitution of one alphabet for another, is there any way to determine which alphabet was discarded and which alphabet was introduced in its place? Since the only two alphabets used for writing Slavic were the Glagolitic and Cyrillic and since the preponderance of the evidence indicates that the Glagolitic is the older, Constantine is telling us that the Glagolitic was replaced by the Cyrillic in 894; at least, it was replaced by the Cyrillic in the Preslav area where Constantine worked and had the authority of a bishop, whereas the Glagolitic continued in use in the west. This would explain why the OCS documents written in Cyrillic all show E Blg features and why it was the Cyrillic which spread to the nearby E Sl region and not the Glagolitic. It could also possibly explain how this new alphabet came to be called "Cyrillic" in spite of the fact that St. Cyril had died many years before its appearance. If it was not specifically devised by Constantine of Preslav himself, it was, at least, propagated under his administration as bishop. The confusion then between Constantine, later known as St. Cyril, and Constantine, bishop of Preslav is quite understandable.

The year 894 is also historically significant, for it was the year of a great National Assembly convened by Emperor Boris. It was the natural time and place to proclaim the use of a new alphabet. In 889 Boris, content with his achievements, had abdicated in favor of his eldest son, Vladimir, and had retired to a monastery. Although nominally a Christian, Vladimir aligned himself with those nobles who were still anti-Christian or anti-Greek and sought alliances with other anti-Byzantine rulers. When he began to persecute Christians, especially the Greek clergy, his father came out of retirement, raised an army, deposed him and in-

stalled his younger son, Symeon, in his place. Boris then called a National Assembly to ratify all decisions and guarantee stability by reaching compromises between the pro-Greek and anti-Greek or anti-Christian factions. He could achieve this by making Christianity more native and less Greek, that is by proclaiming Slavic as the official language of Church and state and by promoting as many native Slavs as possible to the higher ranks of the clergy. The Cyrillic script is simply another fine example of this spirit of compromise. Any literate person in Bulgaria, especially in the eastern regions nearer Constantinople where the influence of Greek culture was greater, would have known the Greek alphabet. This would apply in particular to the clergy; whether or not they were native Bulgarians or Greeks, they had all been accustomed to administering the sacraments in Gr. If they were now to switch over to Slavic, they would need an alphabet which could be learned quickly and easily. The Glagolitic was too strange and difficult for quick mastery but learning the Cyrillic required no more than memorizing the few extra letters added to the well-known Greek script.

The invention of the Cyrillic is also attributed to St. Clement, another famous disciple of St. Cyril and Methodius and one of the refugees who fled Moravia. He was among those elevated to the rank of bishops in 893-4 in the wake of the National Assembly. His see was located in southwestern Macedonia, and he is famous as a teacher, writer and administrator. There is no biography of St. Clement extant in OCS, but there are two such biographies (*vitae*) in Gr. One of these, known as the *Ohrid Legend* or *Short Life*, informs us that "...for the sake of greater clarity, he even invented other signs for the letters of the alphabet different from those devised by the Wise Cyril." If this statement is accurate, it can refer only to the Cyrillic whose clarity or simplicity as opposed to the Glagolitic is beyond debate. However, this *Short Life* was written some three centuries after the death of St. Clement and is full of historical inaccuracies and inconsistencies. It is generally considered an unreliable source.

The authenticy of this statement is further undermined by the fact that there is no reference whatsoever to any invention or reform of an alphabet in the other biography of St. Clement. This second biography, known as the *Bulgarian Legend,* is more detailed and more accurate than the *Ohrid Legend;* it is also closer to the events described, having been written about a hundred years after the death of St. Clement. Finally, the area where St. Clement and his successors worked was the stronghold of the Glagolitic. It is incredible that St. Clement would invent an alphabet but not use it or invent an alphabet for use in another area where he had no influence or authority.

However, all this does not necessarily mean that the statement in the *Ohrid Legend* is a pure fabrication or a mere flight of fancy on the part of the author or copyist. Let us analyze what it says. It tells us (1) a new Slavic alphabet came into existence in the late ninth or early tenth century, that is, in the lifetime of St. Clement; (2) this new alphabet was devised for greater clarity, that is, was simpler

than the one invented by St. Cyril; (3) it was invented or, at least, propagated by someone from the first generation of St. Cyril and Methodius' disciples.

This in essence coincides with the conclusions reached regarding the *prěloženьje kъnigъ* referred to by Constantine of Preslav. The only obvious mistake in the *Ohrid Legend* is that this invention is attributed to the wrong person. Nevertheless, it seems that when the *Ohrid Legend* was being written, there still existed a tradition explaining how the Cyrillic had come into being. The author merely incorporated this bit of "common knowledge" into his narrative. Even if the tradition had become somewhat distorted with time, it is still in basic agreement with other data regarding the origin of the Cyrillic.

The Glagolitic and Cyrillic compared. The content of the columns on pp. 54-6 is as follows:

Column 1: The so-called round (Bulgarian) or Classical Glagolitic as used in the canonical texts of OCS.

Column 2: The so-called square Glagolitic as used in the Cr and later Cz recensions of Church Slavonic.

Column 3: The numerical value of the Glagolitic symbols. Numbers over 1000 (and also 800) are rarely encountered in the documents, and these values are, therefore, supported by very few examples not always beyond dispute. Most of the supporting data for these higher values come from the later Cr and Cz recensions. Symbols without a numerical value are either digraphs (like *y*) or ligatures like the nasals (see comment No. 6) or were added later after the creation.

Column 4: The Cyrillic alphabet. The letters in parenthesis never belonged to the original alphabet; they are used exclusively in scholarly works where Glagolitic texts are transliterated into Cyrillic.

Column 5: The numerical value of the Cyrillic symbols. Only these letters with direct counterparts in the Greek alphabet can serve as numerals and always with the same value as in Gr. This includes also the symbols *s* (6), ҁ (90) and ѯ (900) which had no phonetic value in Gr — only numerical. The similarity of ҁ (90) to ч (*č*) and ѯ (900) to ѧ (*ę*) caused the transfer to these numerical values to purely Slavic Cyrillic letters. The use of ц (*c*) for 900 is in direct imitation of the Glagolitic system.

Column 6: The traditional transliteration which is not always the same as phonetic value. Gr or Gm in parenthesis indicates that the letter was used exclusively in Gr or Germanic borrowings. The numbers refer to the comments 1-7, pp. 57-9.

1	*2*	*3*	*4*	*5*	*6*
		1		1	a
		2			b
		3		2	v
		4		3	g, No. 1
		5		4	d
		6		5	e, je, No. 4
		7			ž
		8		6	dz
		9		7	z
		10		10	i_1, No. 4
		10			i_2
		20		8	i_3
		30			g' (Gr)
		40		20	k
		50		30	l
		60		40	m
		70		50	n
		80		70	o
		90		80	p
		100		100	r
		200		200	s

1	*2*	*3*	*4*	*5*	*6*
		300		300	t
		400		400	u, No. 3
		500			f_1 (Gr)
				500	f_2
					f_3?
				9	th (Gr)
		600		600	x
					x_2 *or* h (Gm)
		700		800	ō (Gr), No. 2
		800			št
		900		900	c
		100			č
		200			š
					ъ
					y
		3000			ь, No. 4
		4000			ě, No. 5
		5000			ju, No. 7
					ja
					je
				900	ę, No. 6

1	2	3	4	5	6
					ǫ, No. 6
					ję, ę, No. 4, 6
					jǫ, No. 6
				60	ks (Gr)
				700	ps (Gr)
		400		400	ü, i (Gr), No. 3
				90	none
				900	none

The structure and development of the Glagolitic. Since it is now all but universally agreed that the Glagolitic script is the one devised by St. Cyril, what do we know about its earliest form? We have four main sources of information; these are the following:

First, the Glagolitic documents themselves from which we see how the symbols were used not only for their phonetic value but also for their numerical value. From the latter we can establish the original alphabetical order of the symbols and also whether a given symbol was part of the original alphabet or not. A symbol without any numerical value can be safely considered as a later addition.

Second, the treatise *O pismenьxъ* written by the monk Khrabr[17] in the late ninth century in defense of the use of Slavic letters. It survived in some seventy copies, the oldest of which stems from the mid fourteenth century. Internal evidence in the text itself strongly indicates that Khrabr is referring to the Glagolitic.

Third, the so-called *Alphabet Prayers.* These are a series of short, one-line prayers or religious statements each of which begins with a different letter of the alphabet and follow each other in alphabetical order. One of these is attributed to

[17] He is referred to as *Čьrnorizьcь* (black robe) *Xrabrъ* in Church Slavonic and this is rended variously in English.

St. Cyril himself but more likely it was compiled by one of the first-generation disciples shortly after the flight to Bulgaria. In any event, the oldest extant copy goes back to the twelfth or thirteenth century.

Fourth, early copies of the Glagolitic alphabet. Two of the oldest are preserved in Latin manuscripts. One of these, discovered in Munich, dates from the end of the eleventh or beginning of the twelfth century; the other, found in Paris, dates from the twelfth.

Although certain details remain obscure, the sum total of information extracted from the above sources gives us a reasonably clear picture of the Glagolitic alphabet as it existed shortly after its creation. The monk Khrabr states that it contained 38 symbols — "24 similar to the Greek letters and 14 on the basis of Slavic speech." Khrabr is describing here the alphabet as brought back from Moravia. He does not distinguish between the letters created by St. Cyril before his arrival in Moravia and any additional symbols which may have been added there later to satisfy local conditions, but he does mention a process of perfecting the script. By "24 Greek letters" he is not referring to the entire Greek alphabet which has since Classical times consisted of 24 symbols. The Glagolitic had no equivalent for Greek θ (= *th* in *the*), ξ (= ks) or ψ (= ps) none of which could have been pronounced by Slavic speakers of that time, but it did contain an additional symbol for *f*, for *x* and a third *i*.

Therefore, by "similar to Greek" he was obviously referring to symbols representing sounds that also existed in Greek. The 24 Glagolitic symbols similar to Greek are, therefore, the following (in Latin transliteration): *a v g d e z* i_1 i_2 *k l m n o p r s t ü* (or *oü*) f_1 x_1 *ō* i_3 f_2 x_2. The 14 symbols needed by Slavic were the following: *b ž dz ǵ št c č š ъ ь ě ju,* the left half of *jǫ*, *ę* (that is, the nasal sign. See No. 6 above.) Note, this list excludes all digraphs, ligatures and symbols without a numerical value.

COMMENTS

1. Glagolitic *dz* represented the reflex of the second and third palatalization of *g*, and likely had the value either of *dz'* or *z'* at the time St. Cyril composed this script. Later *dz'* or *z'* > *z* so that the symbols for *dz* and *z* are often confused. The Cyrillic *s* is used to transliterate the *dz* of Glagolitic in scholarly works, but in the actual texts it is used almost exclusively for its numerical value (six) and very occasionally for *z*.

2. Glagolitic *ō* corresponds to Greek *omega* and there seems to be no phonological reason for its presence whatsoever. It is not even used consistently in Gr borrowings. It occurs quite regularly as the vocative "oh" as in *ō Bože* 'Oh Lord' and in *ōsanna* 'hosanna'. Its inclusion may have had more of a religious motivation than anything else since the phrase *alpha and omega* is so significant in Christian usage.

3. Glagolitic *ü* corresponds to Greek *ypsilon* but is not used consistently in Gr borrowings. Its main function was to serve as the second component of the digraph *o* + *ü* = *u* which is a direct copy of the Greek method of spelling *u*. If one looks at Glagolitic *u*, it is easy to identify *o* + simplified *ü*. Since both this type of *u* and *ü* were used for '400', it is evident that they were not intended as separate alphabetic entities.

4. The Glagolitic front vowels were all used as *iotized* vowels in initial position and after another vowel. Thus, in *selo* vs *estъ* or *moe*, the *e* in the latter two examples is to be read *je*. Similarly, *běda* vs *ěsti* = **jěsti*; *svętъ* vs *toę* = **toję*. It is, therefore, quite certain that one of the three *i*-symbols (likely i_2) was also intended to function in this way, but the original value of each symbol was lost and use of each symbol varies from document to document. Thus, spellings like *moi, poiti, svoimъ* = **moji, *pojiti, *svojimъ*.

The one exception is the *ъ*-vowel. It is never written in initial position or after a vowel. The sequence *jъ* was always written with one of the *i*-letters. Thus, *i* in *dostoino* = **dostojьno* vs *i* in *dostoitъ* = **dostojitъ* and a form like *krai* could be either **krajъ* or **kraji*. In most areas of Slavic *jъ-* and *ji-* merged at a fairly early date, the final result of which was nonjotated *i*. This was likely the situation in St. Cyril's dialect but not in Moravia where the contrast *jъ-* vs *ji-* and/or *i-* vs *ji-* still existed. This necessitated the devising of a new symbol to mark *i* without the *j* on-glide. That is, if St. Cyril used the same *i*-symbol in both *igo* < **jьgo* and *ixъ* < **jixъ* this represented the actual pronunciation of almost all speakers except in Moravia and Cz—UL area.[18] In syllables other than initial ones, *jъ* and *ji* did not merge anywhere, but neither the Glagolitic nor Cyrillic system developed a consistent means of distinguishing one from the other. Both were invariably written with one of *i*-symbols, not with *ъ*.

5. The Glagolitic *ě* did service not only for *ě* and *jě* but also for *ja* and *'a* (that is, *a* after a soft consonant).[19] Thus, *ěviti* = **javiti, *morě* = *mor'a, znanьjě* = **znanьja*. Whether *ě* is to be read as *ě/jě* or *'a/ja* can be determined only on the basis of etymology and/or context.

6. *The Glagolitic nasal vowels.* The older texts used not four but only three symbols for the nasal vowels; these were *ję, ǫ* and *jǫ*. If we examine these original symbols, we notice that they are all composed of two clearly discernible elements. There is a distinct vowel symbol on the left followed by the same component to the right. Obviously, this second component was a special character to mark nasality. It is very clear with *e* + nasal sign = *ę* or *ję* (as with all front vowels) and *o* + nasal sign = *ǫ* but with *jǫ* there is a problem. The nasal component in *jǫ* is clearly the same as in the other two, but the left half occurs nowhere else in the alphabet. It seems to have been a distinct vowel occurring only in a

[18] Compare Cz *jho* vs *jich, jméno* vs *jiný* as opposed to R *igo, ix, imja, inoj*.

[19] This apparent defect is no orthographic oversight on the part of St. Cyril, but reflects actual developments in SW Blg.

nasalized variant. Thus, the traditional transliteration *jǫ* is very likely misleading; something like ǫ̈ would be more accurate. As with other front vowels, the occurrence of the *j* on-glide was completely predictable.

The use of the nasal sign by itself to stand for *ę* as opposed to *e* + nasal sign for *ję* is a later development. In the *Kievan Fragments*, for example, we find the same nasal symbol in forms like **svętъ* as well as in **tvoję*, that is, with the symbol traditionally transliterated as *ję*.

7. *The Glagolitic ju.* As shown, St. Cyril created no special symbol to mark *j* before a front vowel nor for *ja* and very probably not for *jǫ*. This means that the symbol *ju* would be the single example of a distinct symbol for *j* + vowel. This is unlikely; besides, there is no part of the letter remotely reminiscent of *u* (that is, of either *o* or *ü*).[20] Further, syllables of the type palatal and back vowel are untypical of Slavic at that time. These considerations have lead many scholars to believe that this letter stood for an *ü*-type of sound.

Some unsolved mysteries

THE PROBLEM OF x_2 OR THE SO-CALLED SPIDER *x*

Since this symbol has no numerical value, it seems quite clear that it was not part of the original alphabet but added later. It occurs very seldom and always in the word **xъlmъ* 'hill', a borrowing from Germanic, the initial sound of which was *h*, not *x*. The change of **h* > **x* would seem to be a later adaption, for no Slavic dialect at that time possessed *h*. However, for Moravians, Germanic was so-to-speak a next door neighbor and Slavic speakers here perhaps retained a pronunciation closer to the original not only in this one etymon but in all borrowings from Germanic and Lat. It is, therefore, probable that x_2 was added in Moravia for borrowings containing *h*, but there was no need for this symbol once the Glagolitic returned to Bulgaria-Macedonia and it fell into disuse.

The other explanation for the presence of two *x*-symbols is that one was intended for *x* in Slavic roots and the other for *x* + front vowel in borrowings of any source. There is, however, little or no evidence for this, and it would leave unexplained why a corresponding symbol was never divised for *k* + front vowel.

THE PROBLEM WITH THE *f*-SYMBOLS

As with x_2, neither f_2 nor f_3 have a numerical value and, therefore, were not part of the original alphabet whereas f_1 was.[21] Since all *f*-like sounds in Slavic at that time were of foreign origin, it is difficult to see the need for three *f*-symbols.

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[20] Contrast this with the situation in Cyrillic where *ju* is formed like all other *iotized* vowels. There is the usual vertical bar (Gr *iota*) to the left and the first part of *u* to the right. This indicates that it truly stood for *ju* and that *ü* > **ju* in E Blg by the time the Cyrillic arose.

[21] The symbols f_2 and f_3 are sufficiently similar to each other that it is clear that they are merely decorative variants of one another. The problem here is the value of f_1 vs that of f_2 and f_3 taken together.

The f_1 would have been intended by St. Cyril for borrowings from Gr, but in Moravia borrowings with *f* could enter only from Germanic or Lat. This in turn implies that *f* in Gr differed markedly from that in Germanic and Lat — perhaps, a labiodental vs bilabial articulation, but the range of possibilities is very limited. It is unlikely that some fine phonetic detail would necessitate devising a completely new symbol. More likely there could have been a difference in the way two separate groups of Slavic speakers perceived a foreign sound.[22] It has been pointed out that early borrowings from Lat or Germanic into Cz and Slk often exhibit the change **f* > **b* as in Lat *firmare* (or Germanic *firmen*) > *biřmovati*. If we assume that **f* > **b* went through some sort of intermediate stage as, perhaps, **f* > **pu̯* > **b*, then the new symbol would have been necessary for this intermediate stage. Again as with x_2, there would have been no need for this f_2 in Bulgaria-Macedonia, and it was used simply as an alternative for f_1.

Others have suggested that f_2 has no linguistic significance at all but is rather the result of an accident. St. Cyril devised no equivalent for Gr *theta* as is obvious from the fact when *theta* occurs in Gr borrowing,[23] it is used without any change in form and has no numerical value. However, this caused a problem, for Gr *theta* is almost identical to St. Cyril's *f*-symbol. To avoid confusion, the scribes began to use Gr *f* (that is, the symbol *phi* = f_3) or a symbol very similar to *phi* (that is, f_2) to emphasize the *f*-value of the letter.

THE PROBLEM OF THE THREE *i*-SYMBOLS

Scholars have attempted to solve this mystery by investigating the use of the *i*-letters in the *Kievan Fragments* since the orthographic norms of this document are as close as we can get to those of St. Cyril himself. Such analyses have revealed a fairly high degree of consistency in the use of each letter. The symbol i_1 is the only letter used for the conjunction *i* 'and' which is pronounced identically in all areas of Slavic, that is, as *i* without any *j* on-glide. On the other hand, i_2 is used both after consonants and after vowels as in *prosi₂mъ* or *svoi₂mъ*, etc. Since in the last example and many similar ones i_2 is definitely intended to be read as *ji*, we see that i_2 is functioning as all other front-vowel symbols in the Glagolitic system. For example, in *selo* vs *moe* or *estъ* the *e* in the last two forms clearly stands for *je* but not in the first.[24] It seems, therefore, that in Moravian Slavic, the occurrence of *i* vs *ji* was not completely predictable and there arose a need to distinguish one from the other. This was achieved by altering slightly the *i*-symbol already in the

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[22] In W Ukr dialects foreign *f* is perceived as a labiodental voiceless fricative whereas in N and E Ukr it is perceived as either *p* or *xv*.

[23] *Theta* is not used consistently in the OCS Glagolitic documents but is often replaced by *t*, thus, *Teofilъ* for the Gr name *Theophilus*, spelled with *theta* in the original. Such examples show that Slavic speakers had not assimilated *th* (as in Eng *this*) in Gr borrowings. Therefore, St. Cyril devised no equivalent for *theta* whereas he did for *phi* which indicates that Slavs had adopted the *f*-sound. This in turn means that St. Cyril was no slavish imitator of Gr orthography.

[24] There is also the possibility that *e* or i_2 after a consonant may have marked palatalization, but this would depend on many other factors and constitutes an entirely different problem.

alphabet. Thus, i_1 and i_2 are variants of each other both with the same numerical value; i_2 also occurs in such forms as *dostoi₂ni₂* or *věčьnъi₂* which are to be read as **dostojьni* and **věčьnъjь*. The use of i_2 for both *jь* and *ji* merely reflexes a linguistic fact, well attested in Slavic.

Finally, i_3 is used after *ъ* to stand for *y* as in *sъi₃nъ* = **synъ*. This usage is very consistent. It also represents the so-called tense *ь*, that is, *ь* when followed by *j*. For example, *mǫčeni₃i₂* = **mǫčenьji; zьli₃i₂* = **zьlьjь*.

Although the use of these *i*-symbols in the *Kievan Fragments* is not fully consistent, the general scheme as just outlined is widely accepted. It is the best we have so far. Further, it allows us to explain the almost total confusion seen in later documents in the use of these letters. An orthographic means to distinguish *i* vs *ji* was no longer needed in an area where *i* and *ji* tended to merge (as in Macedonia and Bulgaria) nor was there any need to mark tense *ь* when the latter either disappeared or merged with *i*. Various schools of scribes worked out their own spelling rules, but every OCS document has its own peculiarities.

THE PROBLEM WITH *ǵ* AND *št*

The *št*-symbol is transliterated in this way purely as a matter of tradition. It was believed that it was composed of *š* superimposed on *t*, but there are several reasons for believing that the original phonetic value was quite different.

The characteristic OCS sequence *št* (< **tj*) is seldom written with the *št*-symbol but rather by means of *š* + *t*, that is, with two separate letters. The use of the single *št*-symbol for this purpose is a later development. It is difficult to believe that a special symbol existed for *št* since the creation of the Glagolitic but that *š* + *t* would be the usual spelling in the older documents.

It is more difficult to believe that St. Cyril would have created a special symbol for *št* but none for *žd* (< **dj*) which is always written *ž* + *d*.

Sounds written with a combination of two existing symbols such as *y* (always written *ъ* + one of the *i*-symbols) or the nasals (written with a vowel + a nasal marker) were never accorded a numerical value. Yet *št* has the value of 800. This was hardly possible if *št* were composed of two parts.

The numerical value assigned to *št* is lower than that assigned to *š*. This means that its place in the alphabet came before *š*, and this is confirmed by older copies of the Glagolitic. It is highly improbable *št* would precede *š* in alphabetical order if *š* were truly the first component of *št*. In any event, the three upward pointing bars of *št* may have nothing to do with *š*. The *b*-symbol contains the same three bars and obviously has nothing to do with *š*.

The *ǵ*-symbol was used exclusively in Gr borrowings containing a *gamma* + front vowel in such forms as *anǵelъ* < Gr *angelos*[25] 'messenger' or *ǵeona* < Gr *geenna* 'Gehenna'. However, in Byzantine Gr the *g*-symbol in the examples cited stood for two entirely different sounds. In forms with a nasal + *g* (as in *angelos*),

[25] In point of fact, this word is spelled *aggelos* where *gg* = *ng* in traditional Gr orthography.

g remained a voiced velar stop as in Classical Gr. Elsewhere *g* became a voiced velar fricative for which the usual symbol is ɣ. When followed by a front vowel ɣ > *j*. Unfortunatelly, we do not know exactly the pronunciation of a form like *ǵeona* when borrowed into Slavic, but it would have been either **jeona* or **ɣ'eona*. Therefore, *ǵ* in *anǵelъ* and *ǵeona* did not represent a single Gr sound but rather the way Slavic speakers imitated two distinct sounds in Gr borrowings. Traditionally, we have believed that this sound would have been a palatalized *g* (something similar to *g'* in R *na noge*) hence the use of *ǵ* to transliterate this symbol. In other words, we are arguing that Slavic speakers in order to imitate two Gr sounds which did not exist in their own speech created a third sound which hitherto had not existed in Slavic nor in Gr.

If St. Cyril wanted a means to represent *g* + front vowel in borrowings, it is strange that he felt no similar need for symbols to mark both *k* and *x* + front vowel. After all, the restriction forbidding *g* + front vowel applied to all velars in Slavic at that time.[26] Yet there was no such attempt; borrowings containing *k* or *x* + front vowel are spelled simply with the normal *k*- or *x*-symbols, for example, *kesarь* or *cěsarь* (but no special symbol for *k* + *ě*), *kifa* or *xitonъ*.

On the other hand, it is difficult to argue that St. Cyril was overly concerned about reproducing the details of Gr pronunciation. He did not distinguish ɣ from *j* if such existed in his dialect, and he certainly made no provision for marking *dh* (as Eng *th* in *this*) which had developed from *d* of Classical Gr. He did not even devise equivalents for Gr *th, ps* or *ks* obviously because Slavs could not pronounce these sounds. The *ǵ*-symbol, therefore, represented a definite sound existing in the dialect of St. Cyril and Methodius, but was it of Gr (as in the case of *f*) or Slavic origin? The major difficulty here is to establish the phonetic value originally assigned to this letter. Besides the uses already mentioned, there are others — rare but significant. In the *Kievan Fragments* it again occurs in the spelling of *anǵelъ*, but since this document is connected with Moravia and/or Pannonia, Christian terms here would be borrowed from Lat, not from Gr. By the ninth century AD *g* of *angelus* in Vulgar Lat would definitely have palatalized the exact articulation of which (as imitated by Slavic speakers) is, of course, unknown. However, its modern descendants in Cz *anděl*, SC *anđeo*, Hungarian *angyal* would point to a palatal stop or perhaps an affricate. Occasionally the OCS texts (*Zographensis*) provide spellings like *golьǵota* or *ǵazofilakia* where *ǵ* is used to render ɣ of spoken Gr.

In summary then, the *ǵ*-symbol was used for the following: (a) ɣ' or *j*; (b) *g* (in *n* + *g*) + front vowels which in all likelihood was pronounced as *g'*; (c) ɣ + back vowels; (d) a *đ* or *d'* type of sound. Types (a), (b), (c) are found in Gr bor-

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[26] All syllables of the type velar + front vowel had undergone either the first or second palatalization and were thus nonexistent. Slavic speakers would then alter **g* + **e* to either **že* or **z'e*, for *ge* was a foreign-type syllable and difficult if not impossible to pronounce. See p. 115-16, 120-6.

rowings and (d) in a Lat borrowing; in the *Kievan Fragments* (c) is attested only two or three times, and (d) only once but this is the most ancient attestation of its use. It is highly improbable that St. Cyril would have devised some sort of multipurpose symbol for a variety of sounds encountered only in foreign borrowings since he did not even devise symbols for Gr sounds not yet adopted by Slavic speakers. This indicates that *ǵ* was originally intended for a sound of Slavic origin, and in fact the Monk Khrabr (see p. 56) assigns the *ǵ*-symbol to the Slavic group of letters, not the Greek. If indeed for a Slavic sound, there is all but universal agreement among scholars that it would have stood for the reflex of **dj*, a reflex which had not yet merged with any other phoneme. If a separate reflex for **dj* still existed in the dialect of St. Cyril and Methodius, it is then almost certain that there also existed a separate reflex for **tj* for which the *št*-symbol was created.[27]

It is impossible to determine how these reflexes of **dj, *tj* may have been articulated in the dialect known to St. Cyril. They could conceivably have been highly palatalized dental stops (as W Ukr *d, t* in *diva, tisto* where *d', t' > g', k'* often occurs), palatal stops (as M *ǵ, ḱ*) or palatal affricates (as SC *đ, ć*). The acoustic similarity between *d'* and *g'* is very great and palatalization with a stop can easily be perceived as affrication. Assuming any one of the suggested reflexes readily explains how the symbols for this sound could be used in borrowings for any of the values summarized above. Only the use of *ǵ* for Gr *j* is problematic regarding which the following may be said. At the time when borrowings like *geenna* entered Slavic we do not know whether the initial syllable of the Gr original was pronounced as *ɣ'e- or **je-*. If as **ɣ'e*, there is no great problem, and since this would represent an older stage of development, we may assume that substituting Slavic **d'* (or **đ*) for Gr **ɣ'* (and later **j*) had become an established practice by the ninth century. Even if as **j*, it may have been pronounced not as a glide but as a true fricative with a fairly high degree of tenseness.[28] If so, Slavic speakers could have perceived it as their own **đ* or **g'*. Nevertheless, Gr *j* is as often borrowed into M as *ǵ* and into SC as *đ*. For example, M *ǵurǵov* and SC *đurđevo* are derived from spoken Gr *Georgios* with *g = j*. Even E Sl documents from the twelfth century have spellings of the type *Djurdi* for the same name. It is, however, not clear whether this is an attempt to imitate the pronunciation of Byzantine Gr itself or of the M or Blg rendering of such forms. In any event, there is a definite link between Gr **j* (or **ɣ'*) and Slavic **d', *đ* or **ǵ*, the exact phonetic details of which are still unknown to us.[29]

[27] To be perfectly clear, not all scholars are convinced that *ǵ* was indeed intended for a Slavic sound; but if it were, there is agreement that it would stand for the reflex of **dj*. This is because all other historical processes of Late PSl are accounted for by one of the existing symbols. On the other hand, no one has ever argued that *št* was created for non-Slavic borrowings, but it is the only symbol whose existence seems entirely senseless if we take *št* as its original value.

[28] This is true for many speakers of modern Gr whereas *j* in the Blg and M areas, at least in certain environments, tends to be less tense or to disappear.

[29] Greek itself has some examples in the other direction, that is, of *dj > j*, as in *diati > jati* but this is not a regular sound change.

Believing that there may still have existed separate reflexes for both **dj* and **tj* in St. Cyril's and Methodius' dialect is not the same as asserting that *žd* < **dj* and *št* < **tj* were unknown in the Blg-M area nor is it the same as asserting that modern M *ǵ* and *ḱ* are the direct continuations of these reflexes. On the contrary, all available evidence requires us to regard *ǵ* and *ḱ* as being the result of SC influence. On the other hand, it is possible that *žd* and *št* from the east never fully replaced older distinct reflexes for **dj* and **tj* and that SC influence merely tipped the scales in reestablishing an archaic feature.

If, as argued, St. Cyril created *ǵ* and *št* for the reflexes of **dj* and **tj* respectively, there was no need for these symbols in Moravia because in this region **dj* > *z*, and **tj* > *c* for which sounds letters already existed. When later the Glagolitic was brought back south, again there was little or no need for these symbols because the reflexes of **dj* and **tj* were (or being) replaced with *žd* and *št*, which were spelled simply *ž* + *d* and *š* + *t*. This replacing can be attributed to several factors. It seems that the older **d'* and **t'*-type of sounds continued to develop to *žd* and *št* as a normal linguistic process spreading from the north and east. This means that the *žd-št*-type of pronunciation represented that of an ever increasing area and there was a need for standardization based on the speech of the majority. There is also the possibility that the *žd-št* pronunciations were considered more prestigious because they reflected the speech of the capital (Pliska and later Preslav). The older pronunciation remained only in Gr borrowings, largely Christian terminology and Biblical names, and was thus both sacrosanct and traditional. These were the only forms where the *ǵ*-symbol had any use. The fact that the creator of the Cyrillic script devised no equivalent for *ǵ* is a further indication that *ǵ* was originally created for a Slavic sound, which had long since disappeared in the east. Had it been created specifically for Gr borrowings, a similar symbol would be needed in the east as well as the west of Bulgaria. Otherwise we are forced to conclude that speakers in the west somehow imitated Gr in a way quite different from those in the east.

CHAPTER IV

Slavic as a Member of a Larger Family*

In the XVIII century, after European scholars had had a chance to acquaint themselves with Indian culture, it was noted that the sacred language of Hinduism, Sanskrit, bore some remarkable similarities to Greek and Latin. These similarities were of such a fundamental nature, touching such basic features of language structure that they could not be explained away as mere coincidence. In a very famous address before the Royal Asiatic of Bengal in 1786, the English scholar, Sir William Jones, in reference to Latin, Greek and Sanskrit stated that, "no philologer could examine them all three without believing them to have sprung from some common source, which perhaps no longer exists." This declaration became, as it were, the manifesto of a new science which sought to explain historically the affinities not only between the three classical languages mentioned but all other languages with similar affinities. Since these languages occupy an unbroken stretch of territory including all of northern and central India, starting from its eastern most part (as it was in the days of the British Empire, now Bangladesh) and extending to the western most fringes of Europe, they are referred to as the Indo-European family of languages.

In the intervening years, Indo-European comparative linguistics has made tremendous strides all of which have merely strengthened and supported the initial assumption regarding a "common source" for all members of this linguistic family. There is simply no other way to explain the fundamental similarities in these languages than to posit the existence of a Proto-Indo-European language from which all the modern Indo-European languages descended. This proto-language is, of course, unattested, but its existence can be accepted as a scientifically established fact not requiring any additional proof.[1] It is also an established fact beyond any reasonable doubt that the Slavic group of languages is a member of this Indo-European family. It is, therefore, interesting and important for those studying Slavic linguistics to know precisely which languages are most closely related to this family, and for this reason we will list all the attested branches (that is, families) of Indo-European and the major languages belonging to each branch.

In our attempt to gain insights into the nature and structure of Proto-Indo-European we must rely very heavily on those languages nearest the source, that is,

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* No abbreviations are used in this chapter.

[1] This textbook cannot, of course, restate all the data supporting this statement, but the interested student may refer to any of the numerous introductory textbooks of comparative Indo-European linguistics.

the languages with the most ancient attestation. Our knowledge of Proto-Indo-European, not surprisingly, is based largely but not exclusively on extinct languages and these languages are frequently cited in textbooks dealing with historical linguistics of Indo-European or one of its branches. It is, therefore, essential for anyone interested in this field to know something about those extinct languages from which we have gleaned so much of our knowledge. This by and large refers to the most anciently attested language in each of the branches and these will, by necessity, be included in our tabulation, but there is no need to list all the extinct members of each branch. The division of all Indo-European languages into a centum and satem group will be explained later (pp. 79-81).

The centum group

A. ANATOLIAN: all extinct.

1. *Cuneiform Hittite:* The majority of texts are from XIV-XIII centuries BC, but some are as early as XVII-XVI BC. This language is thus the oldest attested form of Indo-European speech. Most of the Cuneiform Hittite documents (clay tablets) at our disposal come from the imperial archives of ancient Hatušaš, the former Hittite capital, near the modern Turkish village of Boğazköy. At first glance, one would think that the extreme antiquity of Hittite would make it very valuable for our knowledge of early Indo-European. Unfortunately, the cuneiform writing system was so illy adapted to Hittite that it conceals almost as much as it reveals. Nevertheless, Hittite provides valuable support for the so-called laryngeal theory which was propounded before the decipherment of Hittite in 1915 by the Czech scholar, B. Hrozný.

2. *Cuneiform Luwian:* Texts also stem from XIV-XIII century BC and from the same source (excavations of Hatušaš) but they are not as numerous.

3. *Palaic:* from the same period and place as above but very few in number.

4. *Hieroglyphic Hittite:* The earliest texts date back to the XVI century BC, but the greatest body of texts are from the period X-VIII BC. Most of them stem from southern Turkey and northern Syria. The name came into use before its decipherment. Later, as we learned more and more about this language, it became evident that it is more closely related to Luwian (but not a dialect thereof). Thus, the name Hieroglyphic Luwian is also used. Success in deciphering was achieved only in the 1930s and 1940s by a number of scholars. Again the imperfections of the writing system conceal much.

5. *Later Anatolian:* Lycian, Lydian, Carian: All texts are in alphabetic scripts derived from early Greek and date from V-IV century BC. It is quite possible, however, that some form(s) of Anatolian speech may have survived into the early Christian era.

B. GREEK OR HELLENIC

1. *Linear B Greek* (also known as *Creto-Mycenaean*): XV-XIII century BC. It was deciphered in as recently as the 1950s by Ventris and Chadwick. The curious name derives from the fact that it was written on soft clay tablets (as was Cuneiform) with some type of pointed instrument. This means that the writer was fairly well restricted in the shapes he could cut, straight lines (linear forms) being easier than circles, twists or curves. However, this type of linear writing is preserved in two forms. One is more archaic, containing more signs (probably ideographs) and is thus called Linear A; the other is younger and somewhat simplified, hence the term Linear B. It would appear that Linear A arose on Crete to write a language (very likely non-Indo-European) quite different from early Greek. When the first speakers of primitive Greek arrived in the region, they adapted this script to their own speech but somewhat unsuccessfully so that it considerably distorts the language. Further, the Linear B tablets themselves are not very extensive being limited almost exclusively to inventories.

2. *Homeric Greek:* the language of the *Iliad* and the *Odyssey* from XII century BC. By this time Greek is being written in an alphabetic script based on the Phoenician. This is the script that is the traditional Greek alphabet.

3. *Classical Greek:* based on Attic dialects, particularly of Athens of the V-IV centuries BC.

4. *New Testament Greek:* colloquial Greek of the I-II century AD.

5. *Modern Greek:* the language of modern Greece, existing in many dialects.

C. ITALIC

1. *Latin:* the earliest inscriptions date as far back as VI-V century BC but classical literary Latin is based on the speech of Rome of the Ist century BC.

2. *Oscan:* texts dating from V century BC to I century AD.

3. *Umbrian:* two sets of documents (tablets) — the newer ones dating from the I century BC, the older from perhaps two centuries earlier.

4. *Romance:* The Italian peninsula contained many dialects belonging to the Italic family, but Latin absorbed them all. Thus, the modern descendants of Italic developed directly from Latin and not from the Italic family as a whole. For this reason we do not refer them as Italic but as Romance languages. Here belong French, Spanish, Portuguese, Catalan, Sardinian, Italian, Romanian, Rhaeto-Romansch.

D. CELTIC

1. *Continental Celtic:* all extinct. This term refers to all those Celtic dialects spoken in Western Europe from the Straits of Gibraltar to the upper reaches of the Danube. By and large, it has disappeared without trace except for Gaulish spoken in what is now France until perhaps the IV or V century AD. All that survives are glosses, names and short inscriptions from ca. V-I BC.

2. *Insular Celtic,* that is, Celtic of the British Isles. The oldest attested language is that known as Old Irish (ca. VIII-XII AD) although there exist earlier inscriptions in a special script known as ogham. These date from the IV-VI AD.

3. *Modern Celtic* — all descendants of Insular Celtic:

(a) *Goidelic* or *Q-Celtic:* Irish Gaelic (called also Erse, Modern Irish or simply Irish), Scots Gaelic (or simply Gaelic), Manx (extinct since early in this century).

(b) *Brythonic* or *P-Celtic:* Welsh, Cornish (extinct since the XVIII century), Breton. This latter is not a remnant of Continental Celtic or a descendant of Gaulish but was introduced into France by settlers from Britain in the V-VII century AD.

E. GERMANIC

1. *North Germanic* or *Nordic:* Swedish, Danish, Norwegian (in two literary variants known as *riksmål* or *bokmål* and *landsmål* or *nynorsk*), Icelandic, Faroese.[2] The language referred to as Old Norse is well documented in manuscript form since the XII century for the western dialects of the language (i.e. early forms of Norwegian, Faroese and Icelandic) and since the XIII for the eastern dialects (the forerunners of Danish and Swedish). However, our knowledge of Nordic speech goes back much further than that — back as far as the II century AD. This attestation is in the form of inscriptions written in an indigenous Germanic script known as runes or the runic alphabet. Up until the end of the VII century the language of these inscriptions is remarkably unified, that is written in what is termed Proto-Norse before dialectal divisions set in. After this date Nordic began to disintegrate into the modern dialects. Runes continued to be used long after the Latin script (along with Christianity) came into common use, but thereafter runic inscriptions become less important linguistically, for the manuscripts are more reliable.

The use of runes was not limited to the Nordic regions. All Germanic speakers used them, including the Anglo-Saxons for Old English. However, nowhere are runic inscriptions so numerous or so valuable linguistically as in the North Germanic area.

2. *West Germanic:* English, High German, Low German, Dutch (including Flemish), Afrikaans, Frisian, Yiddish (written in Hebrew script). Old English (or Anglo-Saxon) is attested as early as the late VII century AD and Old High German — from the VIII.

3. *East Germanic:* all extinct but one language of this group, Gothic, is well attested in the Bible translations by the missionary Wulfila in the IV century AD. Gothic is thus the oldest literary form of Germanic speech although some runic in-

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[2] Another very popular name for this group is "Scandinavian", but since this term can also refer to Finland in both a cultural and geographical sense, it gives the false impression that Finnish is also a Nordic language. Finnish, of course, is totally different, not even belonging to the Indo-European family.

scriptions are older (from III or possibly Ist century AD). Wulfila also devised a new alphabet based on Greek plus some runic symbols for his translations.

F. TOCHARIAN: all extinct. Documents stem from the VI-VII century and reflect two dialects: *Tocharian A* or *East Tocharian,* and *Tocharian B* or *West Tocharian.*

The texts were discovered in the 1890s in northwest Chinese Turkestan. Deciphering was not a major problem because they were written in a known script of Indian origin and much of the material — largely Buddhist literature — is also well known. By 1908 the Indo-European nature of these dialects had been established although they had undergone strong non-Indo-European influence.

The satem group

A. IRANIAN

1. *Avestan:* This is the language in which is composed the Avesta, the sacred writings of the Zoroastrian religion. The Avesta as we know it today was codified under the Sassanid emperors of Persia in ca. IV AD, but the language itself is much more archaic than that. Some parts of it (the Gathas) very likely predate the prophet Zoroaster (or Zarathustra) himself who is believed to have lived and taught in the VI century BC. It is not possible to say exactly when they arose nor do we know how accurately the oral transmission preserved the original features.

2. *Old Persian:* This is the name given to the language of the monumental cuneiform inscriptions of the Achaemenian kings of Persia (VI-IV century BC). For this purpose the Persians had devised a special alphabetic script of 36 cuneiform signs. Cuneiform, as used by other languages, was a mixed system of ideographs, determinatives, syllabic signs (of the type CV, CVC, VC, V), often with one sign having several phonetic values. It was deciphered by Grotefend in 1802.

3. *Modern Iranian languages:* Modern Persian, Kurdish, Ossetic, Pushto, Tajik, Beluchi and many other nonliterary dialects.

B. INDIC

1. *Sanskrit:* This is the sacred language of Hinduism and the vehicle of all Indian literary culture. It was codified by the great grammarian Pānini in the IV century BC but the language described by Pāṇini represents a much more archaic type of speech. This is due to the rigorously precise oral tradition practised in Brahman schools where prayers, hymns and rituals were committed to memory but with the exact pronunciation and forms of past generations. This is particularly true of the invocation known as the Vedas (hence the term Vedic Sanskrit), the language of which may go back as far as 1000 or 1200 BC.[3]

[3] Because of the imperfections in the writing systems for Cuneiform Hittite and Linear B Greek, Vedic Sanskrit is the oldest accurately recorded example of Indo-European speech at our disposal.

2. *Modern Indic languages* — all descendants of Sanskrit: Hindi, Urdu, Bengali, Sinhalese, Marathi, Gujarati, Panjabi, Oriya, Assamese, Nepali, Kashmiri, Sindhi, Bihari, Lahnda and many others including the various Gipsy dialects of Europe.

C. ARMENIAN

1. *Classical Armenian:* The first literary language of the Armenians arose in the early V century AD as the result of Christian missionary activity by Mesrop who presumably not only translated parts of the Bible but also devised the alphabet still used to this day.[4]

2. *Modern Armenian* as a literary language came into general use only in the XIX century when it replaced Classical Armenian which by then differed markedly from the spoken language. It exists in two variants: Eastern Armenian, used in Soviet Armenia; Western Armenian, used by Armenian colonies outside the USSR.

Armenian has no living relatives; it seems that it is the last surviving member of a once larger branch. It probably belongs to the same group as Phrygian, Dacian and Thracian which died out (perhaps by the IV century AD) leaving very few traces.

D. BALTIC

1. *Old Prussian:* extinct by the end of VII century, but it is known to us from a small vocabulary (ca. 1400), and three Lutheran catechisms (two in 1545, one in 1561).

2. *Lithuanian:* attested since the XVI century.

3. *Latvian:* attested since the XVI century.

E. ALBANIAN

1. *Albanian:* attested since the XV century but not extensively until comparatively recent times. As with Armenian, it is likely that Albanian is the only remnant of a once larger branch, but the late attestation makes it difficult to establish what Albanian was like before it was subject to massive Greek and Romance influences.

F. SLAVIC

1. *Old Church Slavic* (or *Slavonic*): an extinct type of South Slavic but attested in religious texts from X-XI century AD, which arose as the result of the missionary activities of St. Cyril and Methodius.

2. The modern languages:

(a) *East Slavic:* Russian, Ukrainian, Belorussian.

(b) *West Slavic:* Polish and Kashubian (considered by some as a separate

[4] Note the similarity between the development of Armenian, Gothic and Old Church Slavic. All achieved literary status and an alphabet thanks to Christian missionaries.

language), Czech, Slovak, Upper and Lower Lusatian or Sorbian, Polabian (extinct since ca. 1750), Pomeranian dialects (extinct by ca. XV century), Slovincian (died out in this century).

(c) *South Slavic:* Slovene, Serbo-Croatian, Macedonian, Bulgarian.

Miscellaneous languages: *centum* or *satem*? Many Indo-European languages have disappeared leaving such meagre traces that we are at a loss when it comes to classifying them. We simply do not know if they represented separate families or are to be considered as lost members of an attested family. Sometimes little more than a name remains; in this category are Phrygian, Thracian, Dacian, Illyrian, Venetic and Messapic. The first three were in all likelihood connected with Armenian. Venetic quite probably was a member of a separate family but may have been an Italic language. Undoubtedly many other forms of Indo-European speech have disappeared without even leaving a name behind.

SUMMARY

1. The shaded patches on the graph represent either

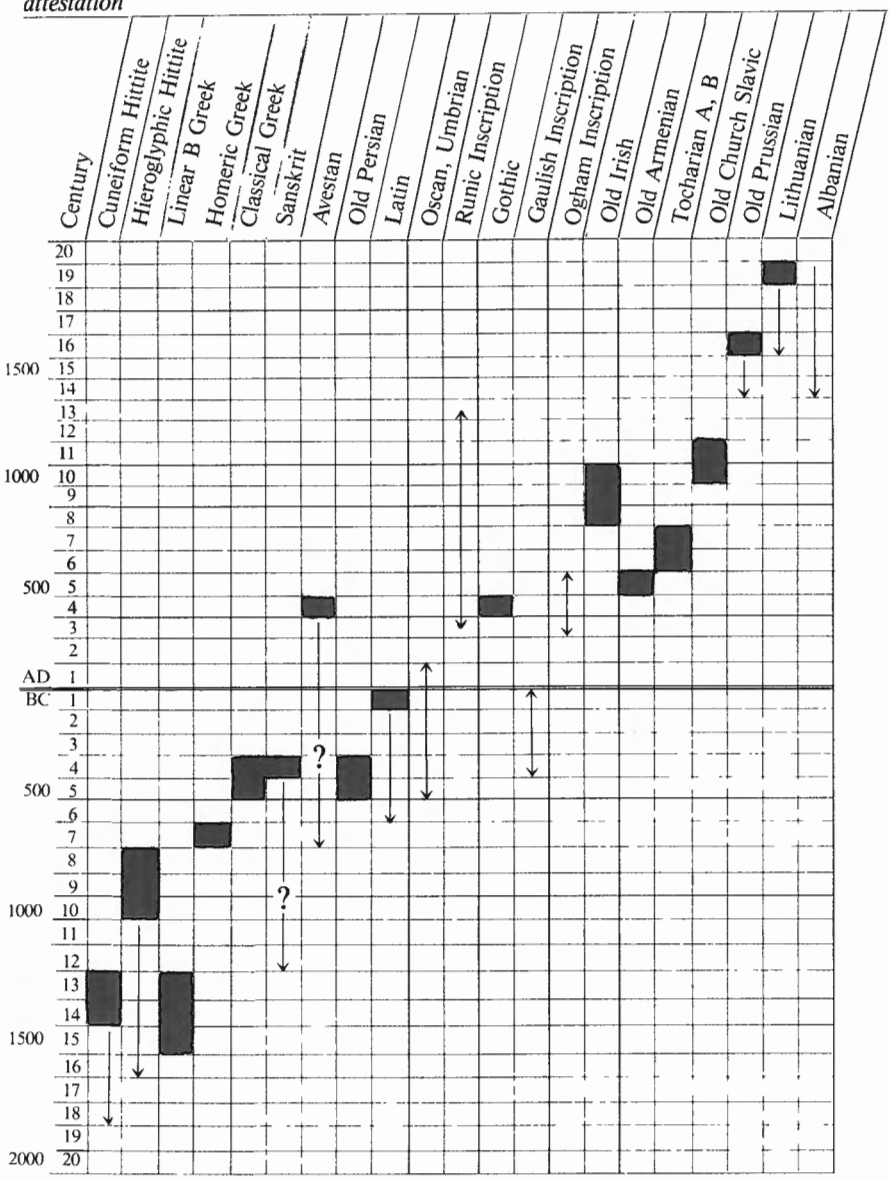
(a) the period in which a given language is standardized into its final classical form. This applies principally to such languages as Classical Greek, Latin, Sanskrit and Avestan and marks the culmination of a long indigenous literary tradition in a given culture.

(b) the period from which there exists sufficient documentation to formulate a reasonably accurate grammar of the language in question.

In both instances the arrow stretching back in time (or three columns — the case of Greek) indicates that we have access to documentation for phases more archaic than that preserved in the classical form of the language. In the case of Sanskrit and Avestaṇ we know that the languages as codified in their classical forms represent a type of language considerably more archaic than that existing at the time of codification.

2. In Indo-European studies only Lithuanian and Albanian are cited in their modern literary forms, the standardization of which are relatively recent.

The Most Anciently Attested Language from Each Indo-European Group



The disintegration of Proto-Indo-European. Since it is an accepted fact that all Indo-European languages descended from one common ancestor, it would be very interesting to know where this parent-language was spoken and when it began to disintegrate. The search for the original homeland of the Indo-Europeans and the problem of their subsequent dispersal have fascinated and engaged the efforts of brilliant scholars for generations. However, we may never have accurate answers to these questions, for the time barrier is simply too great.

Let us start from the known and proceed to the unknown. We possess documentary evidence for the existence of Hittite as early as the XVII or XVI century BC, for Linear B Greek from the XV century BC and for Indic from approximately the same time. Strange as it may seem, the Indic documents come not from India but from Asia Minor. Some, in fact, come from the very same source as the bulk of our Cuneiform Hittite documents — from the ancient archives of Hatušaš. It appears that in the middle of the second millennium BC a group of Indic speakers penetrated into the Near East and imposed themselves as a ruling class in the kingdom of Mitanni, located near the upper reaches of the Euphrates and Habur River, that is, south and east of the Hittites. The majority population of Mitanni spoke a language known as Hurrian, a non-Indo-European form of speech also written in cuneiform. This language continued to be used for all the usual state purposes during the period of Indic domination but the names of the kings and their gods are all etymologically Indic. From this same period, in the Hittite archives is preserved a treatise on horse-training; it is attributed to a certain Kikkuli of Mitanni and contains many technical terms based on Indic roots.[5] Unfortunately, we do not possess a single connected text in this form of Near Eastern Indic. Nevertheless, what we do possess is sufficient to demonstrate that by the middle of the second millennium BC (hereafter for convenience's sake, let us say, by the year 1500 BC) Indic already existed as a separate branch of Indo-European. This, coupled with the more abundant documentation for Cuneiform Hittite and Linear B Greek, means that by 1500 BC we have written evidence for the existence of at least three separate and distinct branches of Indo-European. This, in turn, means that Proto-Indo-European began to disintegrate and its speakers to disperse long before 1500 BC — but how long before is largely a matter of conjecture.

Judging by the distinctive nature of each of the branches attested for 1500 BC, it is estimated that they must have undergone, at the very least, a thousand years of separate development before this date but hardly longer than two thousand. Even if this estimate is relatively accurate, it is still only a minor clue, for it tells us nothing about the other branches of Indo-European. It merely provides the archaeologists with a hint that some large-scale migration of peoples may be expected between 2500 or 3500 BC. But where should one look for this migration?

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[5] For example, in training or exercising a horse, one must put him through a number of turns. These are described in the document as *aika-wartanna* 'one turn', *panza-wartanna* 'five turns' and so on. In Sanskrit the corresponding terms would be *eka vártana-m, pañca vartana-m*, etc.

Where did it start from? Linguists have attempted to answer this question by collecting all the roots common to Indo-European languages and then trying to determine whether this vocabulary points to any specific way of life. For example, if all Indo-European languages possessed a common fund of words for nautical terms and for names of fish, this would indicate that these terms had developed before dispersal and that such a vocabulary would develop only among a seafaring, fish-eating population. Again, terms referring to saltwater fish would tell us to look for the original Indo-European homeland on the shores of some ocean or sea and so on. In point of fact, analysis of the common Indo-European stock of words points in the opposite direction. They seem to have been a land-based people rather than seafaring, preferring plains to mountains, nomadic rather than settled, herders and gatherers rather than farmers. In short, we are looking for a terrain conducive to this mode of life. All the available evidence, historical, linguistic and archaeological, points to the following tentative but very probable hypothesis.

Speakers of Proto-Indo-European were originally grouped in various nomadic tribes moving with their herds back and forth over the grassy plains of southern Europe, somewhere between the Carpathians and the Urals. The North Caucasus—Lower Volga is often mentioned as a very likely location. Viewed in this light, it is entirely possible and even logical that the linguistic breakup of Proto-Indo-European into dialects began quite some time before the final geographic dispersal into western and southern Europe, Asia Minor, Iran and India. It was probably during the third millennium B.C. for reasons as yet unknown that certain groups of these speakers began to change their habitat and their way of life from that of the nomad to that of the primitive but settled farmer-hunter. For this new mode of living, the open plain was no longer suitable but some more protected area was necessary, such as the thick forests that covered most of prehistoric Europe. Under these circumstances, the various groups would no longer be in contact with each other. If any linguistic change took place among one of these groups, it would remain confined largely to that group or, at least, to a much smaller area than was likely under a nomadic way of life.

It is understandable that we cannot talk about Slavic as a separate speech community until the members of that community have introduced, at least, one linguistic innovation not shared by any other group of Indo-European speakers. On the other hand, if two speech communities undergo the same linguistic change, this is no proof that they were neighbors and that the innovation is a shared innovation. It may very well mean this, but it is always possible that two such communities, although far removed from each other, could undergo a similar or identical change independently. Thus, it is with Slavic. Certain processes often seem to be identical with those of Iranian; certain others, with those of Germanic, or Celtic. Which of these are truly shared and which are merely independent innovations is, of course, now impossible to untangle or discuss here. Only in the case of Baltic the number of similar innovations is too great and too specific to be explained as pure coincidence. There was, without doubt, especially in the early

period of their development some rather close relationship between Baltic and Slavic. Thus, in summary, the group of Indo-European speakers later known as Slavs underwent three types of linguistic changes.

1. Changes which may have been shared with other Indo-European speakers during or shortly after the disintegration, bearing in mind that this may well have covered a time span of several centuries.
2. Changes which were quite definitely shared with the group later known as Baltic.
3. Changes which are purely Slavic and which gradually increase in number as we approach historic times.

The language which developed in this way is generally referred to as Proto-Slavic although the term Common Slavic is perhaps equally as well known. As previously mentioned, it is impossible to date with any accuracy when this language began to show even its first signs of independent development. However, the problem of its disintegration is somewhat easier to deal with. Archaeological evidence supported by the observations of Byzantine and Roman writers allow us to be relatively certain that the Slavs continued to occupy their ancestral homeland until the II or III century AD. The precise location of this homeland is still the subject of much debate and controversy. However, in rough outline, it may be defined as follows: the southern limit would be the Sudetes and/or Carpathian Mountains; the western limit would be the Oder-Neisse River and in the east the central reaches of the Dniepr (that is, north of the Steppe). In the north the Slavs may have reached the Baltic coast approximately between the Oder and Vistula Rivers. In the east they would not have penetrated much farther north than the Pripet' Marshes.[6] When the original Slavic homeland is defined in this way it does not mean that Slavs covered that entire area during the time when Proto-Slavic was developing. It would have occupied a much smaller area, it was somewhere within that larger territory defined above that Proto-Slavic developed. This larger territory does, perhaps, represent more or less the area occupied by the speakers of Proto-Slavic in ca. the II or III century AD. Proto-Slavic speakers, however, must have remained within a much smaller area for a long time, otherwise dialectal differences would have appeared much earlier than is actually the case. As a matter of fact, comparative historical linguistics is unable to establish the existence of any dialectal divisions in Proto-Slavic earlier than the VI or VII century AD. If any dialectal differences did, in fact, exist at an earlier date, they were so few and insignificant as to be unrecoverable at the present time.

The beginning of dialectal divisions in Proto-Slavic is directly connected with the great expansion of Slavic speaking people in the IV-VII centuries AD. They spread out in all directions so that, let us say, by the year 800 AD the Slavs had expanded westward as far as a line running from Hamburg to Trieste or Venice.

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[6] The northeastern corner of present-day Poland (Mazuria with former East Prussia) and the northern half of present-day Belorussia were still occupied by Baltic speakers.

They completely inundated the Adriatic Coast (skirting the Albanians safe behind their mountains). They penetrated into Greece as far south as the Peloponnesian and the Aegean Coast. In the east they migrated northward to the headwaters of the Oka and the Volga and the shores of Lake Ladoga.[7] Under these new conditions, it is readily understandable that groups of Slavic speakers would lose contact with one another, each group being in a position to develop new features which may or not pass to a neighboring group. In many instances, Slavic speakers were in closer contact with non-Slavs (Greeks, Latins, Germanic and Finnic speakers) than with their brother-Slavs.

It is now that we enter the final stage in the history of Proto-Slavic, the period of dialectal differentiation leading to the subsequent emergence of separate Slavic languages. During this period Proto-Slavic continues to change and develop as do all languages, but now the linguistic innovations are of three basic types.

1. Changes which still affect the entire Slavic speaking world giving the same results everywhere in the same way as in the pre-expansion period.
2. Changes which affect all Slavic speakers but which give different results in various areas.
3. Changes which are limited to a definite area, that is, only part of the whole is affected.

In Slavic historical linguistics it has become a traditional point-of-view to state that when Proto-Slavic ceased to undergo changes either of the type listed under No. 1 or under No. 2, it ceased to exist as a single linguistic entity. Changes of type No. 3 may very well occur from time to time, but if changes of type No. 1 or No. 2 also occur, this proves that the language is still functioning as a single linguistic entity. The last such change to affect all Proto-Slavic speakers but differently in various areas (No. 2) was the so-called loss and vocalization of jers. This process began in the southwestern corner of Proto-Slavic (that is, the Bulgarian-Macedonian dialects) in the X century and gradually moved to the north and east. In the Ukraine the same process does not occur until the early or mid XII century, and it reaches the Novgorod area approximately a century later. It is after the completion of this process that we begin to speak of separate Slavic languages as opposed to dialects of Proto-Slavic.

This approach, of course, ignores many other vital factors and, thus, can be criticized as overly simplistic. This is to a large extent true, but it is still very useful as a basic outline for organizing chronologically a vast body of material. It should, therefore, be considered as a means of "getting a fix on things" before proceeding to more complicated matters. In this regard, it may be wise to give an example of some of these complications.

Let us take the case of the East Slavic region. The oldest datable process to produce dialectal differences in Proto-Slavic as a whole was the so-called second

[7] The expansion eastward to the Urals and beyond to the Pacific was a gradual process reaching its completion only in the eighteenth and nineteenth centuries.

palatalization. We have, on the other hand, data indicating that this palatalization never reached or, at least, took place very irregularly in the Pskov-Novgorod area, and some evidence for this is preserved there to this day. Therefore, we may tentatively state that dialectal divisions in East Slavic are as ancient as dialectal differences anywhere in Slavic. But again we run into a problem unless we define the term East Slavic. Linguistically speaking East Slavic is the name given to any single feature or to the sum total of features shared by all East Slavic languages. The oldest of these features dates possibly from the VIII or IX century, at least, over a century later than the second palatalization. This, in turn, means that at the time of the second palatalization we can speak about East Slavic only in a geographic sense. At the time in question not a single East Slavic linguistic feature as yet existed. Thus, the East Slavic area was divided dialectally long before the first unifying feature came into existence. Therefore, those distinctive dialectal forms in northwest Russian which are unaffected by the second palatalization are more ancient than are some other features which unite these dialects with Russian as a whole.

The situation described above is really not all that unusual as may first appear. If we draw up a list of features characteristic of any Slavic dialect, there is always a chance that some of the features will predate the end of Proto-Slavic. To state that Proto-Slavic ceased to exist as a single language after it underwent the last process affecting all speakers does not mean that the slate was then wiped clean. Proto-Slavic in its last centuries was deeply divided by dialectal differences. These differences naturally enough did not simply disappear when Proto-Slavic ended. The dialects already in existence merely continued to grow and develop but with one major difference. From then on (after the loss of the jers) no dialect underwent any change which would affect all of Slavic as a whole.

The achievements of the comparative methods. The golden age of Indo-European linguistics falls approximately within the period following the Napoleonic Wars until the outbreak of World War I, culminating in the monumental compilation of K. Brugmann and B. Delbrück, *Grundriss der vergleichenden Grammatik der indogermanischen Sprachen,* Leipzig, 1886-1916. Here were summarized, with painstaking attention to detail, the results of over a century of scholarship. By careful comparing all the known Indo-European languages in their most ancient forms, scholars had been able to present a fairly convincing and plausible reconstruction of both the phonology and morphology of the parent language. In the next chapter we will examine the phonology purposed for Proto-Indo-European.

svoim, glagoje: Primĕte i pijte iz ńeje vsi.

Provĕćajet slovesa posvećenja vrhu Kaleža vnimatelno. savkupno i v taj. drže-i malo vazdvignut.

Se bo jest Čaša Krve mojeje, novago i věčnago zavěta: tajna věri: jaže za vi i za mnogije izlijet se v otpuščenje grĕhov.

Provĕčav slovesa posvećenja, položit Kalež na Tělesnik, i glagoje v taj:

Si jelikokrat tvoriti budete, v moju pamet stvorite.

Prĕkloń koléno poklonit se. vstanet. pokažet ljudem. položit. pokrijet, i paki poklonit se. Po tom rasprostr rucĕ glagoļet.

t nuděže i pametujuće, Gospodi, mi rabi tvoi, na i ljudje tvoi svetii, togođe Hrsta Sina tvojego Gospoda našego toli blaženuju muku, takođeže i ot prĕispodńih vskrsenje, na i na nebesa slavnoje vznesenje: prinosim državnomu veličastvju tvojemu ot tvoih darov i dajanij, stisnet rucĕ i znamenujet tri krati vrhu Oštije i vrhu Kaleža kupno, žrtvu ✠ čistu, žrtvu ✠ svetu, žrtvu ✠ ne-

FROM: S. Smržík (1959), *The Glagolitic or Roman-Slavonic Liturgy*. Rome—Cleveland: The Slovak Institute.

CHAPTER V

The Reconstructed Phonology of Proto-Indo-European

A. CONSONANTS

		Labials	*Dentals*	*Velars*	*Palato-velars*	*Labio-velars*
1.	Stops:					
	Voiceless	p	t	k	$\hat{k}$	k^w
	Voiceless aspirates	ph	th	kh	$\hat{k}$h	k^wh
	Voiced	b	d	g	$\hat{g}$	g^w
	Voiced aspirates	bh	dh	gh	$\hat{g}$h	g^wh
2.	Fricatives:	w	s	y		
3.	Nasals:	m	n			
4.	Liquids:		l, r			

B. VOWELS

ĭ ŭ

ĕ ə ŏ

ă

C. DIPHTHONGS

Short: ĕi̯, ăi̯, ŏi̯, ĕu̯, ău̯, ŏu̯

Long: ēi̯, āi̯, ōi̯, ēu̯, āu̯, ōu̯

D. VOCALIC SONANTS

Short: $\breve{l}$ $\breve{r}$ $\breve{m}$ $\breve{n}$

Long: $\bar{l}$ $\bar{r}$ $\bar{m}$ $\bar{n}$

COMMENTS

1. The development of the palatovelars plays a very important part in the early dialectal division of Indo-European languages. The name itself implies that these entities must have somehow combined both velar and palatal qualities. No other hypothesis can possibly explain the attested data, for in one group of languages only the velar component remains whereas in another group the same roots exhibit no trace of the velar element. If the palatal element is lost, true velars

result. If the velar element is eliminated, the result is a segment articulated in the dental, alveolar or palatal region. It is traditional in comparative Indo-European to use the word "hundred" as a model or sample to distinguish these two groups and to use the Lat and Avestan forms of this etymon as a cover-term for all the languages that share the same features. Thus, if PIE *kṃtŏm* gives Lat *centum* (c = *[k]* in Classical Lat) and Avestan *satəm,* then we use *centum* to apply to any Indo-European language in which the palatovelars give regular velars and *satəm* to describe any Indo-European language in which the palatovelars are reflected as palatals or dentals.

To the *satəm* groups of languages belong Slavic, Baltic, Indic, Iranian, Armenian and Albanian. All the others are *centum*. Note that the *centum-satəm* split is also of geographical character, with *satəm* in the east and *centum* basically in the west. Tocharian and Anatolian are the only *centum* families upsetting this neat division. The basic reflects of the PIE palatovelars in the *satəm* families are summarized below.

$*\hat{k} > s$ (Slavic, Latvian, Old Persian, Avestan, Armenian), *š* (Lithuanian), *ś* (Sanskrit), *th* (Old Persian), *s* and *th* (Albanian)

$*\hat{g} > z$ (Slavic, Latvian, Old Persian, Avestan), *ž* (Lithuanian), *c* = *ts* (Armenian), *j* (Sanskrit), *d* < *dh*? (Old Persian), *z* and *dh* (Albanian)

$*\hat{g}h > h <$ *jh* (Sanskrit), *z* and *j* = *dz* (Armenian). In Slavic, Baltic, Iranian and Albanian $\hat{g}h$ develops as does $\hat{g}$.

2. The reflexes of the labiovelars are also a vital factor in the *centum-satəm* dialectal division of Indo-European. In the *satəm* languages, the labiovelars develop unconditionally into pure velar;[1] in the *centum* languages, they may become either velars or labials or a segment retaining both components. Thus, if *k* is used to represent any palatovelar and k^w to represent any labiovelar, we may summarize the situation in the following table. (Note, for *satəm* languages $*k^w > *k$ is the only possibility; for *centum* $*k^w > k$ is only one possibility; we may also find $*k^w > p$ or $*k^w >$ *ku, kw, kv*.)

	PIE	
satəm	$*\hat{k} > s$	(Slavic and Avestan)
	$*k^w > k$	(all *satəm* languages)
centum	$*\hat{k} > k$	(all *centum* languages)
	$*k^w >$ *qu, c*	(Lat)
or	$*k_w > p, k$	(Oscan)

[1] At a later stage, most satəm languages undergo some sort of palatalization not only of these velars but velars of any origin, but this is limited to certain specific environments as, for example, when the velar is followed by a front vowel or *j*.

3. There is also another series of velars traditionally reconstructed for PIE. These are the so-called pure velars (*k, kh, g, gh*) and are inevitably included in all the older handbooks of comparative Indo-European linguistics. At present, however, there is considerable doubt as to their status in the system as a whole. Now it is generally regarded that they were merely allophones (positional variants) of one of the other velar series.

4. There is even more doubt in modern comparative linguistics about the existence of the voiceless aspirated stops (*ph, th, kh, k̂h, kʷh*). Evidence for their existence is found only in Indic, Iranian, Gr and Armenian, and even at that the evidence is not strong, for the number of examples is small. What's more, there is another explanation for their presence. Therefore, most newer textbooks do not treat them as distinct PIE phonemes but rather explain them as specific developments of the languages in which they occur.

The phenomenon of ablaut. Before one can fully understand any of the reconstructed examples, it is necessary to know something about a special feature of PIE syllabic structure known as ablaut or apophony. According to this system, morphological constructions could differ from one another not only by differences in prefixes, infixes, and suffixes but also by differences in the phonemic shape of the root itself. Ablaut consisted in altering the vowel of a given root in much the same way as in modern Eng we have alternations of the type *sing, sang, sung* and *song*. In such a group the consonants convey the basic meaning, and the vowel indicates a change either in tense (*sing* vs *sang*) or an opposition of verb vs noun (*sing* vs *song*).

In the parent language a root could be altered in a similar way, but the vowels involved were either *ĕ, ŏ* or no vowel at all. Other vowels were involved in this process only very marginally, and there is another explanation for their appearance. A root occurring with the vowel *ĕ* is referred to as the *e*-grade (or normal grade; with *ŏ,* as the *o*-grade (or deflected grade); with *ē* or *ō* as the long *e*-grade (also lengthened grade). If the consonants of a given root appear without any vowel, it is called the *zero*-grade. By using *p* and *t* to represent any two consonantal phonemes of PIE, and with some concrete examples from Gr (3rd column) and Lat (4th column) we may illustrate the ablaut system as follows:

e-grade	**pĕt*	*petomai* 'I fly'	*tegō* 'I cover'
o-grade	**pŏt*	*potē* 'flight'	*toga* 'covering, garment'
ē-grade	**pēt*	*potéomai* 'I flutter'	*tēgula* 'tile'
ō-grade	**pōt*	*pōtaomai* 'flew' (often)	
zero-grade	**pt*	*eptomēn* 'I flew' (aorist)	
		pteron, pterux 'wing'	

In Slavic this phenomenon is best illustrated with examples from the *e* and *o*-grades in which we encounter a fairly consistent pattern — *e*-grade for the verb; *o*-grade for the noun.

ĕ-grade		*ŏ*-grade	*Meaning*
**vez-*	'haul'	**voz-*	'implement for hauling'
**bred-*	'wade'	**brod-*	'ford, wading place'
**stel-*	'spread, set out'	**stol-*	'table, result of setting'
**greb-*	'dig, root'	**grob-*	'grave, rut'
**kes* (> *čes*)-	'comb'	**kos-*	'braid'
**vel-*	'order, direct'	**vol-*	'will, desire'
**plet-*	'braid, weave'	**plot-*	'fence (of woven willows)'
**leg-*	'lie'	**logje* (> *lože*)-	'bed'
**ved-*	'lead'	**vodj* (> *vožd*)-	'leader'
**tek-*	'flow'	**tok-*	'stream'

The long grades are less obvious because Indo-European *ō* develops into *a* in Slavic and Indo-European *ē* develops in PSl into a phoneme marked *ě* and known as *jat'*. This *ě* develops differently in all the modern languages and quite often differently within the various dialects of the same language.

The *zero*-grade all but disappeared in its pure form because PSl simplified almost all its clusters of consonants by simply eliminating the initial member(s) of any given cluster. Further, the *zero*-grade was to a large extent restructured in PSl for reasons which had their origins in PIE.

If a root contained one of the segments *y, w, r, l, m* or *n,* then these segments would appear in their vocalic form in the *zero*-grade. Thus, the root **lyk*^{w} 'leave' may appear in either the *e*-grade (**leyk*^{w}-), the *o*-grade (**loyk*^{w}-) or the *zero*-grade (**lik*^{w}-). Here *e* + *y* or *o* + *y* simply develop into diphthongs and are usually written as **leik*^{w}- and **loik*^{w}-. In the *zero*-grade, there is no vowel with which *y* could interact; it, therefore, appears in its vocalic form, namely, *ĭ*. Let us take another set of examples with the root **drk̂* 'see, sight': **derk̂*- (*e*-grade), **dork̂*-(*o*-grade), **dr̥k̂* (*zero*-grade). Again as with *y,* it appears in its vocalic form when there is no other vocalic element in the syllable. The same applies to the other sonants (*l, m, n*) which can occur in either a vocalic or consonantal allophonic form.

In the majority of cases in the Indo-European languages, the vocalic and the consonantal allophones of the sonants give distinctly different sets of reflexes. This is true of Slavic as well as of Baltic. In both of these language families the vocalic sonants break down in the following way: *r̥* > *ĭr, ŭr; l̥* > *ĭl, ŭl; m̥* > *ĭm, ŭm; n̥* > *ĭn, ŭn*. It has still not been established why in some instances we get *ĭ* + *r, l, m, n* but in others *ŭ* + *r, l, m, n*. In any event, it can be seen that at a fairly early date in Slavic, the *zero*-grade of many morphemes did not signify a cluster of consonants with no vowel at all. For a certain number of forms the *zero*-grade was rather equivalent to either *ĭ* or *ŭ*. Slavic then took the process one step further by lengthening these so-called *zero*-grade vowels. In this way Slavic extended the system of alternations to include *ĭ̆* and *ŭ̆* adding these to the original ablaut interplay of *ĕ* and *ŏ*.

The developments in Slavic may, therefore, be summarized as follows:

1. Any root containing the segments *y* or *w* will regularly occur with the vowels *ĭ* or *ŭ* in the *zero*-grade. This is true of all Indo-European languages.
2. Any root containing the segments *r, l, n, m* will in the *zero*-grade occur with *r̥, l̥, m̥, n̥* > *ŭ* or *ĭ* + *r, l, m, n.*
3. Because of processes No. 1 or 2 *zero*-grade = *ĭ* or *ŭ* in many Slavic roots. On the basis of the existing relationship between *ĕ* and *ē, ŏ* and *ō* a new relationship develops in Slavic whereby *ĭ* and *ī, ŭ* and *ū* begin to play the same role in the ablaut system as the original *ĕ* and *ŏ.* Examples on pp. 88-91.

The laryngeal theory. The phenomenon of ablaut discussed above was described only in its most commonly encountered form. However, Indo-Europeanists had noted long ago that there existed other ablaut series which deviated from the majority pattern. To explain this, they postulated the existence of various secondary series in PIE such as *ē, ō, ə* or *ā, ō, ə.* That is, *ē* or *ā* would occur in these morphological categories where normally *ĕ* occurred; *ō* where *ŏ* occurred and *ə* where normally the *zero*-grade is expected. As a phonetic symbol, *ə* represents an unrounded mid central vowel, but in Indo-European linguistics it merely stands for a reduced vowel of unspecified nature and is referred to as a "schwa-vowel" or simply "schwa". Note that this reduced vowel is equivalent to the *zero*-grade for long vowels. The most innovative explanation (1879) of these anomalies in the ablaut system was offered by the Swiss scholar F. de Saussure. He suggested that the reconstruction of PIE generally accepted at that time was not complete, that is, something was missing from the inventory of proposed phonemes. Some item or items had possibly disappeared from all the Indo-European dialects (or from Late PIE) at a very early date. As a result of this, these missing items do not turn up even in the earliest documentation. De Saussure, however, would not speculate on the phonetic nature of these lost phonemes — only that they behave like sonants and defined them merely as "sonantic coefficients".

The next step was taken by the Danish linguist Møller in 1907 when he defined the missing items as laryngeals. He had no hard evidence for this but merely advanced it as part of a broader theory postulating a connection between PIE and Proto-Semitic. Since the Semitic languages were rich in laryngeals and the Indo-European language had none, it would strengthen the claim of those believing in an ancient Semitic-Indo-European connection to suggest that PIE also had laryngeals but later lost them. Whatever the merits of this claim, the term "laryngeal" (and "laryngeal theory") for these missing segments has stuck.

The next major advance in this theory was made by J. Kuryłowicz, the great Polish Indo-Europeanist, in 1927. In a famous article he pointed out that some of the Indo-European roots in the then newly deciphered (1918) Hittite con-

tained a segment not attested in any other Indo-European language. Thus, the Hittite *paḫš-* 'protect' is obviously a cognate of Skr *pāti* 'protects' and Lat *pāscō* 'I protect' as is Hittite *paḫḫur* 'fire', a cognate of Gr *pȳr,* Tocharian *puwar,* Umbrian *pir,* Proto-Grm **fūri* (Eng *fire,* Germanic *Feur*). But where could Hittite *ḫ, ḫḫ* have come from? Obviously PIE must have possessed an additional sound or sounds lost everywhere except in Hittite. Kuryłowicz then demonstrated that in certain positions Hittite *ḫ* and *ḫḫ* actually appear where de Saussure had posited his sonantic coefficients 36 years before Hittite was deciphered.

Let us now see how the laryngeal theory works with some concrete examples. In traditional Indo-European linguistics, we would posit the following ablaut series: **dhē, *dhō, *dhə* for a root meaning 'put, place, set' in order to explain such cognates as Gr *títhēmi,* Skr *dadhāmi* (< **dhē-*) 'I place'; Gr *thōmós* (< **dhō-*) 'heap' and Gr *thetos,* Skr *hitáḥ* < *dhitás* (< **dhə*) 'placed, put'. Laryngealists prefer to posit this same root containing a laryngeal usually symbolized by means of *H*. Thus, we get the series rewritten as follows: **dhĕH*$_1$, **dhŏH*$_1$, **dhH*$_1$.[2] This then follows the more usual pattern — *ĕ*-grade in a verb (present tense), *ŏ*-grade in the nominal form and *zero*-grade in a past participle passive. Besides, this is the expected shape for an Indo-European root — ending in an obstruent (as **sĕd-* 'sit') or sonant (as **bhĕr-* 'bear, carry'). The laryngeal, however, functions like a sonant in that it vocalizes in *zero*-grade situations. Compare Skr *bhṛt-* 'born, carried' < **bhrt-* (*zero*-grade of **bhĕr* in the past participle passive) with *hitaḥ* < **dhitas* < **dhḤtos* (*zero*-grade of **dheH*$_1$) where *Ḥ* vocalized giving *i*. In the other grades *H* > *ø,* but its loss produced lengthening of the preceding vowel. This type of compensatory lengthening is a commonly encounter phenomenon in historical linguistics.

In the above examples, we posited a simple loss + lengthening, that is, **dhĕH*$_1$ > **dhē, *dhŏH*$_1$ > **dhō* without a change in the quality of the vowel so lengthened. There are, however, other examples where both lengthening and a quality change seem to have taken place. The standard examples are Gr *dídōmi* 'I give', *dōron* 'gift', *dotós.* Compare also the Skr *dádāmi* 'I give', *ditaḥ* 'given' and the Lat *dōnum* 'gift', *datus* 'given'. If we follow the usual pattern we would expect an *ĕ*-grade in the verbal form (present tense) but instead we have a long *ō* (< **dō*?). If the laryngeal explanation is applied, we must posit a different kind of laryngeal — one that not only lengthened when lost but caused *e* > *o,* thus **deH*$_3$ > **dō* or perhaps more accurately **deH*$_3$ > **doH*$_3$ > **dō*. This type of laryngeal is referred to as being *o*-coloured and is marked *H*$_3$ or *O,* that is, **dĕH*$_3$ (or **deO*) > **dō* (in *didōmi*), **dŏH*$_3$ or **dŏO* > *dō* (in *dōron* where *H*$_3$ did not further colour the *ŏ*), **dH*$_3$ + *tos* (or **dO* + *tos*) > **dḤt'os* > **dŏtós.*

Still another type of laryngeal is said to have existed. This is the so-called *a*-coloured one and is marked either *H*$_2$ or *A*. It would occur in such forms as Gr

[2] The use of the number one as a subscript will be made clear below.

hístāmi 'I stand' (Doric dialect), *statós* or Skr *sthitaḥ* 'stood'. The present tense again requires us to assume an *e*-grade in the proto-language, thus, $*steH_2$ > $*staH_2$ > $*stā$ (in *hístāmi*) and a *zero*-grade in the past participle, thus, $*stH_2$ + $*tos$ > $*stH_2tos$ > Gr *statós* but Skr *sthitah*. Note the voiceless stop + H_3 give us an aspirate stop in Skr.[3]

Another feature of the laryngeal theory is the assumption that no Indo-European root would begin with a vowel. Every root would have either an obstruent or sonant in this position. Laryngealists, therefore, would posit the existence of a laryngeal in all those forms where traditional Indo-Europeanists would accept the evidence of the attested forms at face value positing roots beginning with vowels. The loss of a laryngeal in this position did not cause lengthening but H_2 and H_3 did cause a change in quality, that is, $*H_1et$ > $*et$ but $*H_2et$ > $*at$ and $*H_3et$ > $*ot$. However, this assumption on the basis of Hittite and Gr evidence requires us to posit the existence of yet a fourth laryngeal. Let us then take a look at the evidence by comparing four cognates from these two languages.

	1: 'is'	*2: 'before'*	*3: 'bone'*	*4: 'after'*
Greek	ésti	ánti	ósteon	ápo
Hittite	estzi	ḫantzi	ḫastai	appa

Since the vowels in set 1 are unchanged (uncoloured), laryngealists would posit H_1 (or E), the neutral laryngeal, that is, $*H_1esti$. In set 2, we have *a* in both languages; therefore, the a-coloured laryngeal H_2 (or A) is posited, thus, $*H_2enti$ > $*H_2anti$ > *ánti* (Gr), *ḫantzi* (Hittite). In set 3 we are dealing with a noun; therefore, the *ŏ*-grade may have existed in the proto-language. That is, do we reconstruct the root as $*H_3ost$- or $*H_3est$-? This choice depends on the views of individual scholars regarding the structure of Indo-European roots. Theoretically, $*H_1ost$- is also possible since H_1 did not qualitatively affect an adjacent vowel. However, this must be rejected because we have seen that initial H_1 in both Hittite and Gr is lost. Therefore, the initial laryngeal in the Hittite form for 'is' must have been different from the one in 'bone', for the former was lost, but the latter was retained.

Similar considerations arise when examining set 4. It all depends on how one reconstructs the basic nonablauting Indo-European root. For those who consider *e* as the original vowel or starting point for all such roots, it is necessary to reconstruct a root containing a laryngeal + *e*, but a laryngeal that produces the change *e* > *a* and then is lost, that is, we must posit an *a*-colouring laryngeal, something like $*H_2ĕpŏ$ > $*H_2ăpŏ$. But in set 2 we see that Hittite does not lose H_2 in initial position. Therefore, it is necessary to posit a fourth laryngeal — one

[3] This and similar examples lead laryngealists to consider the voiceless aspirates (*kh, ph, th, k̂h*) as a cluster of voiceless stop + laryngeal, not as unitary phonemes which is the traditional interpretation.

which 'colours' $e > a$ but is subsequently lost, unlike the *a*-colouring laryngeal of set 2, that is, $*H_4ĕpŏ > *H_4ăpŏ >$ Hittite *appa*, in contrast to $*H_3ost- > *H_3ast- >$ Hittite *ḫastai*. For those who believe that an Indo-European nonablauting root could contain any vowel, the problem is much simpler. They are free to posit simply $*H_1ăpŏ >$ Gr *àpo* and Hittite *appa* since H_1 is lost without changing a following vowel in either language. Other more traditional Indo-Europeanists, even supporters of the laryngeal theory, would argue that such forms prove nothing since there is no clear evidence that an Indo-European root could not begin with a vowel. That is, why not simply posit **ăpŏ* as the original form?

We have seen that the laryngeal theory originated as an attempt to bring the ablaut phenomenon into a more orderly system. Later it was expanded to explain the presence of *ḫ* and *ḫḫ* in certain Indo-European roots in Hittite. Over the years laryngeals have frequently been called into service to clarify various other anomalies in traditional Indo-European studies, a discussion of which would require a separate monograph and cannot be dealt with here. However, one more example may be instructive: the forms *kaurus* (Gothic), *barús* (Gr) and *gurú* (Skr) meaning 'heavy, weighty' have long been recognized as cognates, but the difficulty arises when we try to reconstruct the proto-form. All the comparative evidence points to $*g^wr̥̄us$, each segment of which would develop regularly in each language as we have them attested. The problem is that in order to account for these regular developments, we must posit not only a long vocalic sonant but a vocalic sonant + a vowel ($-r̥̄ + ŭs$), and this is a phonetic oddity if not an impossibility. Laryngealists would resolve this contradiction by reconstructing the root as $*g^wr̥Hus$. Since a laryngeal is believed to function like a sonant, *H* in prevocalic position would act here as a consonant. This in turn puts *r* between consonants where *r̥* is perfectly normal, and the loss of *H* would cause *r̥* to develop as a lengthened segment.

Thus, laryngealists explain the *r̥̄*, *l̥̄*, *m̥̄*, *n̥̄* traditionally reconstructed for PIE as a sequence of *CrHC*, that is, Skr *pūrṇá-* 'full' < $*pl̥Hno$, not $*pl̥̄no$.[4] It is precisely in sequences of this type that some researchers claim to see traces of laryngeals in Slavic. The loss of a laryngeal after a sonant as in **plHn-* presumably would result in a syllable with a rising or acute pitch whereas *pln-* would develop into a syllable with falling or circumflex pitch.

$*pl̥Hnŏs > *pl̥̄nŏs > *pīlnŭs > *pȍlnъ$; SC *pùn*
$*wl̥k^wŏs > *wl̥kŏs > *wīlkŭs > *vȏlkъ$; SC *vûk*

The more enthusiastic laryngealists posit for a very early stage of PIE a phonemic system containing only one vowel. It is customary to indicate this single vowel with the letter *e*, but this does not necessarily mean that the vowel in question was a mid front vowel — it is merely a mean for marking a unit of

[4] *l, l̥, l̥̄ > r, ur, ūr* are the expected reflexes in Sanskrit.

syllabicity.[5] All other vowels are derived from this one vowel of primitive Indo-European. Later *o* and a reduced vowel (*ə*) arose as allophones of */e/* and both *e* and *o* could lengthen in situations where *ə* was lost in a following syllable. Initially */e/* > [*o*] or [*ə*] was presumably conditioned by stress (and/or pitch) as was the loss of [*ə*], and stress, in turn, was largely conditioned by morphological factors. In this way the presence of *e, o, ē, ō,* a reduced vowel or zero in any given morpheme became associated with its morphological function thus giving rise to ablaut phenomenon of later Indo-European. Other long vowels arose as the result of the loss of a following laryngeal (**eH*$_1$ > **ē*, **eH*$_2$ and **eH*$_4$ > **ā*, **eH*$_3$ > **ō*, **i* and *u* + a laryngeal of any colour > **ī*, **ū*) and other short vowels as the result of the loss of a preceding laryngeal (**H*$_1$*e* > **e*, **H*$_2$*e* and **H*$_4$*e* > **a*, **H*$_3$*e* > **o*).

More cautious laryngealists would argue simply that it is logical to posit a long vowel deriving from a vowel + *H* where we have either evidence from Hittite or where such an assumption makes structural logic as, for example, in removing the major anomalies in the ablaut system. This, however, does not mean that every long vowel necessarily arose in the same way. By the same token, *a* in some instances may in fact have originated from **H*$_2$*e* or **H*$_4$*e*, but this does not prove that *a* could not have existed independently in the language at the same time as laryngeals.

The whole laryngeal theory can be brought into disrepute by overworking it, that is, by using laryngeals to solve every remaining problem in Indo-European linguistics. Nevertheless, the laryngeal theory explains too much to be rejected out of hand, and very few contemporary Indo-Europeanists are prepared to do so. If the laryngeal theory had remained nothing more than a theoretical proposition (as de Saussure suggested), it would still be quite persuasive, but there is, in addition, the documentary evidence from Hittite. Following are some examples of ablaut in Slavic. All forms are in OCS unless otherwise specified. The sound changes responsible for the attested forms are all explained later on in the text.

Grade	PSl	Root: *r - k* 'speak, language, utter'	
ĕ	*rĕk* + *ōm*	> *rekǫ*	I speak
ŏ	*prŏ* + *rŏk* + *ŭs*	> *prorokъ*	prophet
ē	*rēk* + *sŭm*	> *rěxъ*	I spoke (aorist)
	rēk + *ĭs*	> *rěčь*	speech, word
ĭ	*rĭk* + *oi̯*	> *rьci*	speak (imp.)
ī	*prŏ* + *rīk* + *atei̯*	> *proricati*	to prophesy

[5] This position may not be as extreme as it appears at first glance. The system also contained [*i*], [*u*] but as the vocalic allophone of */y/* and */w/* respectively, that is, [*sŭHnŭs*] < */swHnws/*.

Grade	PSl		
	Root: *g - r* 'warm, heat, burn'		
ĕ	*gĕr + āvā*	> *žèrava* (SC)	glowing coals
ŏ	*gŏr + ēteį*	> *goréti*	to burn
ē	*gēr + ŭs*	> *žar* (R); *żar* (P)	embers
ō	*sŭ + gōr + āteį*	> *sъgarati*	to burn up; *ugar* (R) fumes from burning, *ogarek* (P) butt end of unburned candle
ø	*gr + ēteį*	> *grěti*	to warm, heat
	gr + ējāteį	> *grějati*	
	Root: *t - k* 'flow, run, flee'		
ĕ	*tĕk + ōm*	> *tekǫ*	I run, hurry
ŏ	*pŏ + tŏk + ŭs*	> *potokъ*	stream, brook
ē	*ĭz + tēk + ateį*	> *istękati*	to flow out, gush
ō	*tōk + ēteį*	> *taczać* (P)	to roll
ĭ	*tĭk + oį*	> *tъci*	run (imp.)
	Root: *gr - b* 'dig, scrape'		
ĕ	*grĕb + ōm*	> *grebǫ*	I dig
ŏ	*grōb + ŭs*	> *grobъ*	grave
ē	*pŏ + grēb + āteį*	> *pogrębati*	to bury
ō	*grōb + īteį*	> *grabiti*	to snatch, scrape up
ī	*pĭ + grīb + āteį*	> *pogribati*	to bury
	Root: *l - g* 'lie, lay, put, place'		
ĕ	*lĕg + teį*	> *lešti*	to lie down
ĕ + n[6]	*lĕng + ōm*	> *lęgǫ*	I lie down
ŏ	*nā + lŏg + īteį*	> *naložiti*	to lay on, burden
	lŏg + jŏ	> *lože*	bed
ē	*nā + lēg + āteį*	> *nalegać* (P)	to press, insist
ō	*nā + lōg + āteį*	> *nalagat'* (R)	to lay on, impose
ĭ	*prī + lĭg + nŏteį*	> *przylgnąć* (P)	to be close, placed next to, stick

[6] The addition of *n* within a root is referred to as a "nasal infix" and is known in other Indo-European languages.

Grade	PSl		
	Root: *pl - t* 'braid, twist, knit'		
ĕ	*plĕt + ōm*	> *pletǫ*	I braid
ŏ	*plŏt + ŭs*	> *plotъ*	hedge
ē	*sŭ + plēt + āteį*	> *sъplětati*	to twist together, entangle
ī	*sŭ + plīt + āteį*	> *sъplitati*	to bind together
	Root: *r - z* 'cut, hit, wound'		
ē	*rēz + āteį*	> *rězati*	to cut, hack
ō	*pŏ + rōz + īteį*	> *poraziti*	to hit, insult
ĭ	*rĭz + nŏteį*	> *rъznǫti* > *rznąć* (P)	to cut, butcher
	Root: *s - d* 'sit, set, place'		
ĕ	*sĕd + ĭlo*	> *sedlo* (Cz)	saddle
ĕ + n	*sĕnd + ōm*	> *sędǫ*	I sit down
ē	*sēd + teį*	> *sěsti*	to sit down
	son + sēd + ŭs	> *sǫsědъ*	neighbor
ō	*sōd + īteį*	> *saditi*	to set, plant
ø	*gnē + sd + ŏ*	> *gnězdo*	nest
	Root: *m - r* 'die, kill, destroy'		
ĕ	*mĕr + teį*	> *mrěti, meret'* (R)	to die
ŏ	*oų + mŏr + īteį*	> *umoriti* to kill,	*moryty* (Ukr) to starve
ō	*mōr + īteį*	> *mařiti* (Cz)	ruin, annihilate
ĭ	*mĭr + ōm*	> *mьrǫ*	I am dying, exhausted
ī	*oų + mīr + āteį*	> *umirati*	to be dying
ø	*sŭ + mr + tĭs*	> (*sŭmrtĭs*) > *sъmьrtь*	death
	Root: *g - r* 'opening (esp. for eating), hole, devour'		
ĕ	*gĕr + dlo*	> *(d)žerelo* (Ukr), *žřiedlo* (Old Cz)	source, spring
ĭ	*gĭr + āteį*	> *žьrati* > *žrat'* (R)	to devour, gabble
ī	*pŏ + gīr + āteį*	> *požirat'* (R)	to eat up
ø	*gr + tvā* > *grtva*	> *gĭrtva* > *žьrtva*	offering, sacrifice
	gr + dlo > *grdlo*	> *gŭrdlo* > *gardło* (P), *hrdlo* (Cz)	throat

Grade	PSL		Root: *v - rt* 'turn, twist, roll'
ĕ	*vĕrt + ĕnŏ*	> *vereteno* (Ukr)	spindle
	vĕrt + mēn	> *vrěmę*	time (that which turns)
ŏ	*vŏrt + ītī*	> *vratiti (sę), vorotit'* (R)	to turn around, to return
ø	*vr̥t + ĕti*	> *vьrtěti* > *vertity* (Ukr)	to twist, drill
	vr̥t + nŏteį	> *vьrnǫti* > *vernuty* (Ukr)	to turn

			Root: *l - yp* (or *l - ĭp*) 'stick, glue, adhere'[7]
ĕ	*leįp + ŭk-*	> *lypkyj* (Ukr)	sticky
ŏ	*pri + loįp + ītei̯*	> *prilĕpiti*	to attach to, join
ø (= *ĭ*)	*pri + l̥ĭp + āteį*	> *prilьpati*	to stick
	pri + l̥ĭp + nŏteį	> *pril'nut'* (R), *přilnouti* (Cz)	to adhere to

			Root: *s - wx* (or *s - ŭx*) 'dry, parch, lose moisture'[8]
ŏ	*soų̯x + ŭs*	> *suxъ*	dry
	soų̯x + ītei̯	> *sušiti*	to dry
	soų̯x + jā	> *suša*	drought
ø (= *ŭ*)	*s̥wx = s̥ŭx + nŏteį*	> *sъxnǫti*	to dry up
ū	*ū + s̥ūx + āteį*	> *vysyxaty* (Ukr)	to become dry, dry up

(That is, the same vowel as in the zero-*grade but lengthened.)*

[7] Roots containing the semivowels are written variously. For reconstructing PIE forms, it is customary to write *y* and *w*; for PSl to write *j* and *v*. Thus, we write *k̂lew* for PIE but *slov* for PSl (other changes: *k̂* > *s*, *e* > *o* are expected). Sometimes for both PIE and PSl notations like *k̂leų̯*, *sloų̯* are used. These vacillations in usage should not obscure the fact that we are dealing here with semivowels which according to environment can function as a vowel (*ŭ* or *ĭ*), a consonant (*w*/*v* or *y*/*j*) or a glide (*u̯* or *i̯*).

[8] See previous footnote.

Grade	PSl		
		Root: *sl - w* (or *sl - ŭ*)	'word, reputation, listen, hear'
ŏ	*slŏw + ŏs*	> *slovo*	word
ŏ	*sloų + teį*	> *sluti*	to call, to name
	sloų + xāteį	> *sluxati*	to listen
ō	*slōw + ā*	> *slava*	glory, fame
ū	*slū + xętеį*	> *slyšat'* (R)	to hear
		Root: *r - wd* (or *rŭd*)	'red, reddish'
ŏ	*rowd = (roų̆d) + ā*	> *ruda* (R)	ore
	roų̆d-	> *rudyj* (Ukr)	reddish in complexion
ø	*rwd = rŭd + jā*	> *rъžda*	rust
	rŭd + ěti	> *rdet'* (R)	to turn red
ū	*rūd*	> *rūd + jŭs* > *rydz* (P)	reddish mushroom
		Root: *g - y* (or *g - į*)	'life, health, growth'
ě	*gěį + teį*	> *žiti*	to live
ŏ	*gŏj + ītеį*	> *gojiti*	to heal
ō	*gōj + ŭs*	> *gaj* (P)	grove (that is, rich growth)
		Root: *p - n*	'strain, stretch, spread'
ě	*sŭ + pěn + teį*	> *sъpęti*	to pull together, bind
ŏ	*ŏb + pŏn + ā*	> *opona*	curtain
	pŏn + tŏ	> *pęto* (P)	fetter
ĭ	*sŭ + pĭn + ōm*	> *sъpьnǫ*	1st person sing. of *sъpęti*
ī	*sŭ + pīn + ātеį*	> *sъpinati*	imperfect of *sъpęti*

PIE root	*Meaning*	*PSl*	*OCS*	*Examples from other Indo-European Languages*
1. ĝombh-	tooth	*zomb*	*zǫbъ*	*jambhah* (Skr), *gomphos* (Gr), *kamb* (Old High Grm 'comb'), *žam̃bas* (Lith)
2. *ĝheĭm-/ ĝhyem-*	winter	*zeĭm-*	*zima*	*hēman, himá* (Skr), *kheìma* (Gr), *žiemà* (Lith), *hiems* (Lat)
3. *leiĝh-*	lick	*leĭz*	*lizati*	*lihati* (Skr), *leíkhō* (Gr), *ligūriō* (Lat), *ligim* (Old Irish), *liccian* (Old Eng), *liežiù* (Lith)
4. *dek̂m-t-*	ten	*desent*	*desętь*	*daśa* (Skr), *deka* (Gr), *decem* (Lat), *dešimt* (Lith), *taihun* (Gothic)
5. *k̂erd-*	middle	*serd-*	*sr̆eda*	*kardíā* (Gr), *cord-* (Lat), *hairto* (Gothic), *širdìs* (Lith)
k̂r̥d-	heart	*sr̆d-*	*srьdьce*	*karts* (Hittite), *cride* (Old Irish)
6. *pork̂-*	pig	*pors-*	*prasę*	*pãršas* (Lith), *fearh* (Old Eng), *orc* (Old Irish)
7. *steigh-*	step, climb	*steig-*	*stignǫti*	*stighnōti* (Skr), *steikhō* (Gr), *steigan* (Gothic)
8. *bhrāter*	brother	*bratr-*	*bratrъ*	*bhrātar* (Skr), *phrātēr* (Gr), *frater* (Lat), *broþer* (Gothic)
9. *penkʷe*	five			*pañca* (Skr), *pente* (Gr), *quinque* (Lat), *fimf* (Gothic)
penkʷt-	fifth	*pent*	*pętь*	*pemptos* (Gr), *peñktas* (Lith)
10. *gʷhe/*or*(m)-*	warm(th)			*háras* (Skr), *thermós* (Gr)
gʷhor-	warm(th)	*gor-*	*gorěti*	*formus* (Lat), *warms* (Gothic), *gãras* (Lith), *gharmáḥ* (Skr)

PIE root	*Meaning*	*PSl*	*OCS*	*Examples from other Indo-European languages*
11. *kʷo*	who, what	*kŭ-*	*kъto*	*kaḥ* (Skr), *hwas* (Gothic)
kʷā				*hwō* (Gothic)
kʷi		*kĭ*	*čъto*	*quis* (Lat), *ti, tis* (Gr), *pis* (Oscan), *cia* (Old Irish), *kuis* (Hittite)
12. *dhūm-*	smoke	*dūm*	*dymъ*	*dhūmá-* (Skr), *thūmós* (Gr), *fūmus* (Lat), *dūmai* (Lith)
13. *tep-*	heat	*tep-*	*teplostь*	*tapati* (Skr), *tepcō* (Lat)
top-	warmth	*top-*	*topiti*	
14. *dom-*	house	*dom-*	*domъ*	*dámaḥ* (Skr), *dómos* (Gr), *domī* (Lat)
15. *gʷoų*	cow, beef	*gov-*	*govędo*	*gauḥ* (Skr), *bous* (Gr), *bov-* (Lat), *bó* (Old Irish), *cū* (Old Eng), *govs* (Latvian)
16. *ghordh-*	enclosure	*gord-*	*gradъ*	*gṛha-* (Skr < *ghṛdho*), *khortos* (Gr), *hortus* (Lat), *garda* (Gothic), *gařdas* (Lith)
17. *wḷkʷ-*	wolf	*vĭlk-*	*vlьkъ*	*vŕka-* (Skr), *lukos* (Gr), *lupus* (Lat), *wulfs* (Gothic), *vilkas* (Lith)
18. *preḱ-*	ask			*praś-* (Skr), *precor, prex* (Lat), *graihnan* (Gothic)
proḱ-		*pros-*	*prositi*	*procus* (Lat), *frāga* (Old High Grm), *prašaũ* (Lith)
19. *be/ol-*	strong	*bol-*	*bol'ьjь*	*balam* (Skr), *beltiōn* (Gr), *de-bilis* (Lat)
20. *bher-*	carry	*ber-*	*berǫ*	*bháram* (Skr), *phérō* (Gr), *ferō, biru* (Old Irish), *bairan* (Gothic), *bérnas* (Lith)

CHAPTER VI

From Proto-Indo-European to Proto-Slavic

Introductory remarks. Here we will discuss briefly those major linguistic processes which gradually changed a form of Late PIE into a new language called Proto-Slavic. This chapter will deal only with the changes that occurred before PSl itself began to break up into dialects, that is to say, with changes that are common to all forms of Slavic speech. As mentioned, the dialectal disintegration of PSl could not have begun until approximately the sixth or seventh century AD and PIE began its final breakup perhaps as early as the fourth millennium BC. The last date is, of course, merely an approximation for orientational purposes; the point is, however, that we are dealing with a very long period of time — four thousand years, perhaps.

Although not specifically of linguistic significance, it would also be extremely interesting to know when each individual change occurred, and whether these changes proceeded gradually and evenly over the entire period, rapidly within a short time span or with periods of stability and innovation interspersed. Slavicists would be particularly interested in dating the process giving rise to */x/* by the operation of the so-called *i-u-r-k* formula (see below), for this seems to be the oldest purely Slavic innovation. Even if we accept the view that this process began in later PIE, for there are temptingly similar (but not identical) processes in Indic, Iranian, Armenian and Lith (but not in other Baltic languages), the end result, nevertheless, is specifically Slavic. Shevelov suggests placing this process in the sixth-fifth centuries BC (p. 137) but this is the latest possible dating, a *terminus ad quem*. It may well have taken place much earlier; but we will probably never know even approximately.

When dealing with this early period in the development of Slavic, we are lucky even to be able to establish the relative chronology of some of processes. However, the chronologies are based on firmer data, proposed for the next period, for during this later period of expansion and dialectal differentiation, the Slavs came into contact with other ethnic groups and lexical borrowings occurred. If, for example, we know the time of contact with a given language and borrowings from that language undergo certain specific Slavic processes, then we know that these processes were either in progress or took place after the time of contact. If, on the other hand, the borrowing does not undergo certain Slavic change, then we know that this change had ceased to operate before the time of the borrowing. Similarly Slavic borrowings or names recorded in another language allow us to see what changes had occurred at the time of contact. Thanks largely to these methods

we are able to establish within reasonable limits the dates of certain key phonological changes in Late PSl; then linguistic science and logic can usually fill in the remaining gaps. With the early period, however, we are unable to establish any such fixed points before or after which other processes could be logically arranged. The suggested chronologies, therefore, represent the considered opinions of competent scholars on how the various changes may have proceeded. The one followed here is that proposed by Shevelov, with some omissions and simplifications for the sake of conciseness.

Loss of aspiration in the aspirated stops. As shown elsewhere, it is accepted that all Indo-European dialects possessed the following voiced aspirates: *bh, dh, ĝh, gh, g^wh.* The existence of a corresponding voiceless series, *ph, th, kh, k̂h, k^wh* is by no means equally as well established. If they existed at all, they were either retained or arose later in a rather limited number of dialects (Indic, Armenian, Gr and Iranian).[1] In Slavic all the voiced aspirated stops lose the feature of aspiration and merge with the corresponding unaspirated stop. Thus,

b, d, gh, ĝh, g^wh
bh, dh, g, ĝ, g^w } → *b, d, g, ĝ, g^w*

If the voiceless aspirates ever existed in the dialects from which PSl developed, then they underwent the same development as their voiced counterparts. Only in the case of *kh* is there some debate. Normally one would expect *kh* > *k* but there are some few examples in Slavic indicating that *kh* > *x*. That is, in the languages capable of showing a separate reflex of *kh,* this reflex (although reliable examples are few) corresponds to some examples of *x* in Slavic. Thus, Skr *śākhā* 'tree branch' seems clearly to be a cognate of R *soxa,* P *socha* 'primitive plough' (from a branch). These may have been borrowings from Iranian speakers in the area north of the Black Sea.

The loss of syllabic sonants

r̥ > *ŭr, ĭr* *m̥* > *ŭm, ĭm*
l̥ > *ŭl, ĭl* *n̥* > *ŭn, ĭn*

It will be noticed that the vocalic sonants break down into the sequence vowel + consonant. The resulting vowel is always either *ŭ* or *ĭ,* but we are still unable to define the conditions under which *ŭ* as opposed to *ĭ* arose. It is simply not known why, for example, *r̥* should give *ŭr* in some roots but *ĭr* in others, thus, *tr̥g-* > *tŭrg-* vs *tr̥p-* > *tĭrp* (*torg* vs *terpet'* in modern R). Most likely, the conditioning factors

[1] As indicated (p. 81, 84-5), the voiceless aspirates are now interpreted as a sequence of *p, t, k* + laryngeal. In most areas of Indo-European, the laryngeal here was lost without trace but in the dialects mentioned the sequences gave rise to the voiceless aspirates.

were the nature (whether labial, dental, etc.) of the consonant both preceding and following the syllabic sonant.

The loss of the labiovelars

$k^w > k$ and g^w (from both g^w and g^wh) $> g$

The complete absence of any labial feature in the labiovelars is one of the developments which clearly marks Slavic as belonging to the *satəm* group within Indo-European. (See pp. 92-3, Nos.: 9-11, 15 and 17.)

The rise of x < s. Although there exist some few instances where PSl *x* seems to have originated from *kh* (or *k* + laryngeal), in the vast majority of cases *x* originates from Indo-European *s*. This change, however, occurs only under very specific conditions; namely, *s* must be preceded by *i, u, r* or *k* and followed by a vowel, that is, *s* > *x/i, u, r, k* — *V*. Because of the environment required for *s* > *x* it is often referred to as the *iurk*-formula or the *ruki*-rule.

	**mūsĭ*	>	**mūxĭ* (later *myšь*)
	**mŭsŭ*	>	**mŭxŭ* (later *mъxъ*)
	**aų̯sŏ*	>	**aų̯xŏ* (later *uxo*)
	**kŏstĭsŭ*	>	**kŏstĭxŭ* (later *kostьxъ*)
	**pŏrsŭ*	>	**porxŭ* (later *praxъ, poroxъ*)
	**rēksŏm*	>	**rēkxŏm* (later *rēxŏm* > *rěxъ*)
	**voi̯sā*	>	**voi̯xā* (later *věxa*)
but	**rēkstĕ*	>	**rēkstĕ* (later *rěste*) } no *s* > *x* because *s* was followed
	**īstīnā*	>	**īstīnā* (later *istina*) } by a consonant

From the very formulation of this *iurk*-formula, it is evident that *x* could not arise in initial position since *s* had to be preceded by another segment before *x* could develop. For this reason, it has always been a vexing problem in Slavic historical linguistics to explain the origin of all those Slavic forms beginning with *x*. One obvious source is those Indo-European roots having *k* + *s* + vowel or *r* + *s* + vowel in the initial syllable. As will be discussed below, PSl later simplified most consonantal clusters by discarding the first member. Thus, a form like *kseḱt-* 'six' would undergo the following developments: **kseḱt-* > **kxeḱt-* > **kxest-* > **xest-* > **šest-* (*ḱ* > *s* is a regular process as is *x* > *š* by the so-called first palatalization). However, the number of Indo-European roots with structures of the type *k* or *r* + *s* + vowel is much too meagre to explain all the instances of initial *x* in Slavic.

Another obvious source is foreign borrowings as, for example, the oft cited instance of the word for "bread" (R *xleb,* P *chleb,* Blg *xl'ab*) which was borrowed from the Gothic *hlaifs* originally with the meaning "loaf" (cp. Old Eng cognate *hlāf* > *loaf*). But this source also falls far short of explaining all

instances of initial *x*. The problem remains controversial and open for investigation.

Development of the palatovelars

$\hat{k} > s$ and $\hat{g}$ (from both $\hat{g}$ and $\hat{g}h > z$

These developments coupled with the loss of the labial component of k^w, g^w definitely assign Slavic to the *satəm* group (see also pp. 80-1). It must also be emphasized at this point that $s < \hat{k}$ is not subject to the operation of the *iurk*-formula; *s* from this source never gives *x;* only the PIE *s* undergoes the shift to *x*.

There exists a certain number of examples — not many but too many to be dismissed as mere oddities — in which, contrary to our expectations, Slavic agrees with the *centum* languages in the development of $\hat{k}$, $\hat{g}$ (< $\hat{g}$, $\hat{g}h$).[2] For example, all the evidence indicates that the PIE etymon for "goose" would be **ĝhans*. If the normal sound laws for PSl are applied to this root, **zǫs-* would be the expected result, but this expected form is nowhere attested — only *gǫsь* occurs. The development $\hat{g}h > g$ or to any other velar is what we would expect in a *centum* language: **ĝhans* > *khēn* (Gr), *(h)anser* (Lat) or *gans* (Old High Grm). In fact, it has long been argued that Slavic *gǫsь* is nothing more than a borrowing from a *centum* language, in this case, from Germanic. This suggestion may very well be true as far as this particular word is concerned, but all instances of $\hat{k} > k$ or $\hat{g} > g$ in Slavic cannot be explained as borrowings. It would seem rather that the dialects of early PSl experienced some sort of confusion in the velar series. That is, *k* and $\hat{k}$, *g* and $\hat{g}$, *gh* and $\hat{g}h$ became interchangeable or confused in certain roots. This is perhaps not too surprising if we take two factors into consideration.

Firstly, as indicated elsewhere, in the classical reconstruction of PIE three series of velars have been posited. It is now generally believed that one of these series (the pure velars *k, g, gh*) was merely in allophonic relationship to one of the other two. If Slavic then exhibits some confusion between the pure velars and the palatovelars, it means simply that the allophonic distribution of *k* vs $\hat{k}$, etc. was different than in other more easterly Indo-European dialects. Secondly, the impetus for this redistribution of allophones may have been due to the fact that Slavic was the most westerly of all the *satəm* dialects. The close proximity of dialects having lost the palatovelars series may have influenced *satəm*-speakers to extend the use of the so-called pure velars.

Merger of $\bar{a}$, $\bar{o}$ and $\breve{a}$, $\breve{o}$, $\breve{ə}$ and lowering of $\breve{e}$

$\bar{a}$, $\bar{o}$ > ɑ̄: long low back vowel without distinctive rounding
$\breve{a}$, $\breve{o}$, $\breve{ə}$ > ɑ̆: the same as above but short
$\bar{e}$, $\breve{e}$ > ǣ, æ̆: long and short low front vowels

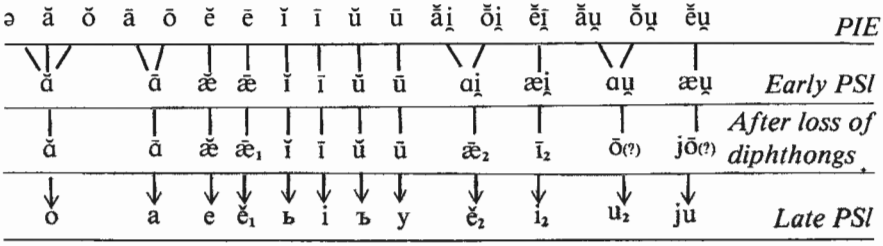
[2] Baltic also exhibits the same feature but not always in the same word.

The symbols ā, ǣ are used here because they are the ones employed in the International Phonetic Alphabet for vowels of the types defined above, but other symbols are used. Depending on the text consulted, instead of ɑ one may find ɔ, ₒa, ɑ or simply *a;* instead of æ — *ä,* ₑa, ₒe or *ĕ*. As a result of these phonological changes, the vocalic system of PSl was fully restructured.

Older system	*New system*
ĭ ŭ	ĭ ŭ
ĕ ə ŏ	æ̆ ă
ă	

The development of a new vowel system at this time in the history of PSl is now an undisputed fact in Slavic studies. Nevertheless, its existence is often ignored in the standard handbooks and etymological dictionaries. There are three basic reasons for this. Firstly, the existence of this vowel system was established relatively recently — long after a unified notational system for PSl reconstructions had been established and accepted by all Slavicists. Secondly, no new system has arisen to replace the old or rather none of several competing systems has gained general acceptance. Thirdly, the old system is perfectly adequate for expressing the relationship between PIE and Late PSl, and for the structure of Late PSl itself, and this is the usual starting point for all comparative and historical investigation of Slavic dialects and standard languages including OCS.

Anyone studying historical Slavic linguistics is, therefore, faced with the necessity of becoming acquainted with the traditional notational system as well as with several newer (linguistically more accurate) variants which may differ widely from author to author. In order to explain this problem, we will first of all summarize the history of the vowel systems from PIE to Late PSl in chart form.



Regarding the loss of the diphthongs, see pp. 117-19.
Regarding the development of Late PSl vowel system, see pp. 148-51.

REMARKS

1. There is some evidence that PIE diphthongs existed in two variants, that is, *ăi̯* vs *āi̯; ĕi̯* vs *ēi̯*. If such a distinction even existed in PSl, it was lost without trace at a very early date. Therefore, for Early PSl we need to

reconstruct only one type of diphthong in which the length or brevity of the vocalic nucleus was irrelevant, thus, simply *aį* (or ɑ̨), etc.

2. The same linguistic process which brought about the merger of *ă* and *ŏ* into ă also brought about the merger of such diphthongs as *ăį, ŏį* > ɑ̨ and *ăų, ŏų* > *aų* (or ɑ̨).

3. The same would apply to any diphthong having *ĕ* as its nucleus. Any change in *ĕ* should bring about the same change when it formed the first member of a diphthong.

4. As mentioned, it is traditional to ignore all intervening stages between PIE and Late PSl largely because there is no generally accepted system to represent this intermediate stage, especially for the reflexes of the merger of *ə, ŏ,* ă and *ā* or *ō*, and also for the lowered *ĕ*. The notational system (lines 2 and 3 of the Chart) have been used here for orientational purposes only; instead of this one, the major systems proposed to date are as follows:

by Shevelov	*by Mareš*	*by Stieber*
ĭ ŭ	ÿ̆ ÿ̆	ĭ ŭ
ₑă ₒă	ä̆ ă	ĕ ă

All are agreed that this was an eight-member vowel system based on a three-fold set of oppositions: (1) long vs short, (2) front vs back, and (3) high vs low. Note that there is no rounded vs unrounded contrast. All the notational systems indicate these points but each one emphasizes various other factors. For example, the use of *ÿ̆* for the high back members of this system emphasizes that rounding was nondistinctive. On the other hand, the evidence (largely borrowings) indicates that these vowels were phonetically rounded until fairly late in PSl, hence, the use of *ŭ* for these same phonemes. This also emphasizes the PIE source of these phonemes, and what's more, it is the traditional usage.

It is also traditional to use *e* to stand for some type of mid front vowel, but this vowel system did not possess mid vowels — neither front nor back, or more precisely, it possessed no high vs mid or mid vs low contrast. Once this fact is clearly understood there is no reason why *e* cannot serve to represent the non-high front vowels of PSl. Yet this absence of distinctive mid vowels is perhaps best emphasized by using symbols like æ or *ä* which are again traditionally associated specifically with low front vowels.

Similar considerations apply when choosing a symbol for the PSl low back vowel. Some prefer not to use *a* since this symbol is most commonly associated with a low central type of vowel, not a low back one. Further, using a symbol other than *a* emphasizes the fact that the PSl low back vowels (both short and long) resulted from a merger of PIE *ă, ŏ, ə,* hence the use of ɑ, *å,* ₒ*a,* all of which stress that this phoneme is not a direct continuation of PIE *ă*. The last two emphasize origin although Shevelov contends that ₒ*a* also captures some phonetic

reality; ɑ further emphasizes the distinctive features of this phoneme — low and back.

Finally considerations of practicality and simplicity cannot be ignored. Such symbols as $_{o}a$ and $_{e}a$ are graphically well chosen to put across both historical and phonological, and (in Shevelov's view) phonetic information, but they are both difficult to work with and to reproduce. They are simply not readily available to the average writer or printer. Similarly a symbol like *å* can appear strangely ungainly if ever it is necessary to add the length and brevity marks (‿) above it.[3] No system of notation can be expected to capture every detail, and an example or set of examples that attempts to convey every detail may well obscure the purpose of the example.

Let us take, at least, one concrete instance of this. If a given reference work reconstructs the root for 'forge, work red-hot metal' as **koų*, it means that we have comparative evidence for positing an *oų*-type of diphthong in this PIE root. If then the same reference cites **koųteį* > **kuti* vs **koųateį* > **kovati*, the point is perfectly clear: *oų* > *u* before a consonant but *oų* > *ov* before a vowel. However, at the time of these developments, PSl possessed no *o*-type vowels or diphthongs. Rather we had **kɑųtæį* > **kuti* vs **kɑųātæį* > **kăvātī* but using **kɑų* obscures the PIE shape of the root and **kăvātī* is not readily recognizable until it is explained that by another later change **kăvātī* > **kovati*. In this particular case, over attention to detail does not serve us very well. In these and many other instances the traditional system conveys all that is necessary by avoiding reference to any intermediate stages. Such stages need be mentioned only when they clarify but not when they complicate.

In view of the above, this textbook will cite all examples in the traditional system (line 4 of the Chart) except when its use obscures the facts. That is, there is no real need to refer to any intermediate stages (lines 2 and 3 of the Chart) except when a given process is made clearer by reference to them.

The law of the open syllable. Starting from a fairly early date, various developments in PSl all tended to give the language a syllabic structure of the type CVCVCV (where C = any consonant; V = any vowel). That is, every syllable must end in a vowel, a so-called open syllable. One manifestation of this tendency is the loss of all final consonants. The only exceptions are some prepositions and/or prefixes which by their very nature cannot appear in phrase-final position, that is, **bez* remains *bez* (not **be*) because **bez* is always followed by another form.

The simplification of consonant clusters. This process like the one described above also went a long way in establishing the CVCV-type of syllable structure. Many textbooks overstate this process leaving the impression that PSl tolerated no

[3] L. Moszyński uses Stieber's system but introduces *å* instead of *a* precisely to specify its sources.

clusters at all. This is a mistake; certain sequences of consonants were never eliminated, but the number of permissible clusters was very limited. By the end of PSl, only the clusters indicated below could exist. As can be seen, PSl was not devoid of consonant clusters, but the possibilities are certainly very small when compared to any modern Slavic language.

	Two-member clusters			*Three-member clusters*			
1.	b, p	+ r, l		*1.*	s	+ p	+ r
2.	d, t	+ r, l, v			z	+ b	+ r
3.	g, k	+ r, l, v, n		*2.*	s	+ t	+ r, v
4.	s	+	l, v, n, m, p, t, k		z	+ d	+ r, v
	z	+	l, v, n, m, b, d, g	*3.*	s	+ k	+ r, v, l
5.	x	+ r, l, v			z	+ g	+ r, v, l

The usual method of simplification was to eliminate the consonants as the following example illustrates. If we again use C to represent any consonant, then in a cluster such as $C_1C_2C_3C_4$, the first consonant to be dropped would be C_3. If $C_1C_2C_4$ then happened to consist of any of the permissible three-member clusters (such as *spl, stv,* etc.), then no further simplification would take place. If, however, the resulting cluster was not permissible, then C_2 would be dropped. That is, a cluster such as *skn* would simplify to *sn* which is now a permissible cluster, and thus no further simplification is necessary. If the resulting two-member cluster were again not permissible then C_1 would drop.

One small group of exceptions to the above is seen in clusters of the type *p, b* + *v*. Here simplification proceeds in the opposite direction, thus, **obvęzati* > **obęzati* (that is *bv* > *b*) as opposed to **obsypati* > **osypati* (here *bs* > *s* with the usual elimination of the first member of an unacceptable cluster).

At this phase in the history of PSl, there was no restriction on syllables ending with sonorants, that is, ending with glides (*j, u̯*), liquids (*l, r*) or nasals (*m, n*). Therefore, syllables like *teįta, teųta, telta, terta, temta* or *tenta* were still perfectly acceptable but will all undergo restructuring at a later date making them conform to the classical CVCV syllabic form of PSl.

Before leaving this topic, it is necessary to mention one other characteristic syllabic restructuring. This concerns *tt* and *dt* which simplify not by the usual elimination of the first member of the cluster but by a process of dissimilation, that is, both *tt* and *dt* > *st*. A similar process also took place in Gr, Baltic and Iranian; therefore, it may be very ancient encompassing as it does a fairly contiguous strip of central eastern PIE. On the other hand, the evidence indicates that *tt, dt* > *st* very likely arose independently in each area.

In Slavic the evidence for this change is most clearly seen in a verb, the stem of which ends in *t* or *d* and to which is suffixed the infinitive ending *teį* (later *ti*). In the following examples, the final form is the infinitive of the verb as attested in

OCS. After the meaning, the first person singular of each verb is cited where we see that the original consonant of the stem reappears.

**met + tęi* > *metteį* > *mesti* (to throw, hurl), *metǫ*
**plet + tęi* > *pletteį* > *plesti* (to twist, braid), *pletǫ*
**ved + tęi* > *vedteį* > *vesti* (to lead), *vedǫ*
**prend + tęi* > *prendteį* > *pręsti* (to spin), *prędǫ*
**grend + tęi* > *grendteį* > *gręsti* (to come), *grędǫ*

Note how closely the OCS situation parallels that existing to this day. For example, let us cite the same forms, that is, the infinitive and first person singular, of the same verbs in three modern languages in which the alternation *st* (or its later development) ~ *t* or *d* is fully functional.

Ukrainian	Polish	Serbo-Croatian
mesty, metu	*mieść, miotę*	*mèsti, mètēm*
plesty, pletu	*pleść, plotę*	*plèsti, plètēm*
vesty, vedu	*wieść, wiodę*	*uvèsti, uvèdēm*[4]
pr'asty, pr'adu	*prząść, przędę*	*prèsti, prédēm*
		grèsti, grèdēm

Infinitives in *-sti* have had a certain degree of productivity in Slavic. In OCS, for example, the root *greb + ti* > *greti* 'to row, dig, scrape' for only *d, t + ti* > *sti* whereas the cluster *bt* merely simplifies to *t*. In R, however, we have *gresti ~ grebu* and SC *grèpsti, grèbēm* in which *st* has simply become, as it were, a means for marking an "irregular" verb.

Similarly the root **klĭn + tęi* should regularly develop a nasal vowel in the infinitive but with the *n* retained in the personal forms. This is precisely what we find in OCS: *klęti* 'to swear' but *klьnǫ* 'I swear'. If the regular sound laws continue to operate in E Sl, we would expect to have infinitive forms like **kl'at'* (R), **kl'aty* (Ukr) and **kl'aci* (Br) but *klenu* (R), *klynu* (Ukr) and *klinu* (Br) for the first person singular. In essence these latter forms are precisely what actually exists — only the vowel of the root has been restructured giving *kl'anu* in all three literary languages. However, the expected infinitive forms are found nowhere; all have had *s* inserted before the infinitive ending. There is no historical justification for this; that is, no sound law can explain it. It would almost seem that the *s* was felt as necessary to mark the verb as "unusual". Similarly in colloquial P one hears *wziąść* instead of literary *wziąć*.

The development of prothetic consonants. In connection with the general Slavic tendency to develop syllables of the type CVCV, almost every form now ended with a vowel. It then became necessary to prevent hiatus (that is, any running-

[4] The verb *-vesti* in SC no longer occurs without prefixes.

together) of a final vowel when followed by a form beginning with a vowel, that is, CVCV + VCV > CVCV + CVCV. The development of this new consonant was also helped by the fact that syllables of the type VCV were becoming unusual whereas syllables like CVCV were in the majority.

A segment added in this way is referred to as a prothetic. In PSl the prothetic consonants were *j* and *v* (at that time most likely a bilabial, not a labiodental). The choice of one consonant as against the other was determined by the nature of the vowel to which it was attached. Although the details are rather more complicated, in general, it can be stated that rounded vowels receive *v*; others receive *j*.

v before *ŭ* (later *vū* > *vy; vŭ* > *vъ*) is very consistently retained in all of Slavic although the subsequent loss of *ъ* in weak position often obscures this regularity. Similarly *j* before the low front vowels (traditionally *e, ě,* and *ę*) is relatively stable and is retained more or less intact throughout Slavic. Prothetic elements before the PSl low back vowels (traditionally *a, o*) are less stable and are either lost entirely or replaced with new prothetic consonants at later stages in the development of PSl dialects or in the individual languages. This will be discussed below.

The prothetic element was not present in those few instances where it was not required to maintain the CVCV structure. PSl still retained a small number of prepositions and prefixes ending in a consonant such as **bez* 'without', **jьz,* 'out, out of' or **ob* 'about, concerning'. If these or similar prefixes were involved, there was no need for the prothetic. Thus, the comparative evidence from all other Indo-European languages shows that the root **ēd* 'eat' contained no initial *j,* yet the same root in Slavic is attested with *j* everywhere. However, when *ob* was prefixed to this same root, that is, to **jěd* in Slavic, there is no trace of *j* at all. Therefore, we have **ob* + **ědъ,* not **ob* + **jědъ,* for this latter would have given rise to an epenthetic *l'* but this is not attested anywhere — only **obědъ* 'meal' and its reflexes but never **obl'ědъ*. Similarly PSl **jęti* 'to take, grasp' with new *j,* not inherited from PIE (cp. Lat *ēmō* 'I buy' or Lith *imù* 'I take') has **podъ* +*jęti* but **vъz* + **ęti,* never **vъz* + **jęti,* for *z* + *j* > *ž*, but **vъžęti* is attested nowhere.

Later when weak *ъ* and *ь* are lost, the number of situations where a prothetic element was no longer needed increased greatly. Thus, with **jiva* 'willow' (from **jeįvā* < **eįvā*) we used to have **blizъ jivy* vs **bez ivy*. However, after *ь* and *ъ* are lost, speakers are faced with a new linguistic situation which can be handled in one of three ways:

1. The former rules may be retained without change. That is, *j* or any other prothetic element is dropped after consonants so that **blizъ jivy* > **bliz ivy* just as with **bez ivy* but *j* would still be retained after a vowel or in phrase initial position as in **na jivě* or **jiva vysoka.*
2. The prothetic consonant could be generalized in all instances.
3. The prothetic consonant could be dropped in all instances.

Solution No. 1, although theoretically possible, is found rarely, but both No. 2 and 3 are well attested. In the case of *v* + *ŭ̄* No. 2 is the only attested solution. There is not a single example where *v* followed by *ъ* < *ŭ* or *y* < *ū* is dropped. On the other hand, *j* before *ь* < *ĭ* and *i* < *ī* is dropped everywhere except in the Czech—Upper Lusatian area. On a more local level, prothetic *j* is also lost before *e* and *e* < *ę* in the Bulgarian—Macedonian area and frequently before *a* in OCS and modern Blg. It is also lost in E Sl before *u*₂ < *jeu̯* as in **jeu̯tro* > **jutro* > **utro*. From these data, several important points emerge:

— The loss of prothetic elements with such broad local variation points to its Late PSl origin.
— The prothetic element is most likely to be retained in those instances where a later change produces a district phonetic difference between the prothetic consonant and the vowel following it.
— The opposite applies to those situations where the prothetic element and the following vowel are of the same articulatory nature.

For example, *j* + *ĭ̄* and *v* (or *w*) + *ŭ̄* constituted syllables in which the consonants and the vowels were of the same configuration. This changed, however, when *ū* > *y* (an unrounded vowel) and *ŭ̄* > *ъ* (a less rounded and lower vowel). Thus, *v* is no longer a consonantal approximation of the following vowel. On the other hand, *jī* remains unchanged and *jĭ̄* > *jь* only minimally; *j* is still articulatorily a natural on-set for these vowels. These latter could be discarded when the syllabic structure of Late PSl changed (by dropping weak *ъ, ь*) and initial vowels no longer required a protective consonant. However, *v* + *y* or *ъ* could not be perceived in the same way, no more than could *v* + *a, e* or *i*.

Illustrative is the development of PIE *yŭgŏm* 'yoke' in Slavic: **yŭgŏm* > **jŭgo* > **jьgo* (retained in Cz-UL[5]) or *igo* (everywhere else). The comparative evidence for the existence of an initial *y* (*j* in our notation) in this PIE etymon is beyond debate, yet all the attested reflexes in modern Slavic have *i* in this position (or *j* < *jь* in the case of Cz *jho*, the expected reflex of *jьgo*).

We cannot explain the presence of *i* or *ь* < *ŭ* without assuming the presence of *j* before *ŭ*, for *jŭ* > *jь* is a normal syllabic adjustment for PSl (see pp. 116-17). Further, we cannot explain the loss of *j* without assuming a general loss of *j* before *i* or *ь*. Thus, from the competing forms with and without prothetic *j* (as in **bez iga* vs **za jьgo*), the *j*-forms where generalized only in Cz—UL but the *j*-less forms elsewhere. It will also be noted that wherever *j* is lost before *ь*, the resulting vowel develops as *i*, not *ь*. It would seem that in initial position *ь* was articulated with greater tension, thus, allowing it to merge with *i* in all features except length, and this distinction would also disappear later when most formerly long vowels shortened (see pp. 156-60). In any event, PSl did not permit *ь* (or *ъ* for that matter)

[5] This specific form is lost in UL but other examples make it clear that this is the usual reflex of *jь-* (where *ь* is weak) for UL.

in initial position.[6] The *ъ* in *jъ-* develops as expected of *ъ* only where *j* is retained; where *j* is dropped, *ъ* consistently develops as *i*. Why only one small area opposed the general trend to drop *j-* before *i* and *ъ* is impossible to say. However, in both areas the old and new *j* are treated identically. That is to say, Cz—UL retain both the old *j* inherited from PIE and the new prothetic *j* which developed as a purely PSl phenomenon whereas elsewhere *j* of both origins is lost. Thus, Cz has both *jíva* < **jeįvā* (with new *j*) < **eįvā* and as we have seen *jho* (with *j* from PIE) as opposed R *iva* and *igo*.

At the time when prothetic consonants were developing, Slavic still possessed the older two-level vowel system. The front vowels ĭ and ă̆ (traditionally *e, ě*), as indicated, all acquired a prothetic *j*, and the high back ŭ acquired *v*. In both instances these new *j* and *v* merged completely with those inherited from PIE and thereafter developed identically. We would expect, therefore, that the remaining back vowels (from hereon we will use ă instead of the traditional *a, o*) would also receive one of these prothetic elements — more likely *v* than *j*, since we are dealing with back vowels, but this logical assumption will not explain the observed data. In the discussion that follows it must be stressed that whatever applies to ɑ also applies to the sequences ɑu̯ (traditionally *ou̯, au̯*) > *u* and ɑnt > ǫt, but not, however, to ɑi̯ (traditional *ai̯* < *ŏi̯, ăi̯*) which is a separate problem.

All the data at our disposal would indicate that ā received a prothetic *j* whereas ă (traditional *o*) received no prothetic at all. Such an assumption explains the observed facts but is highly unlikely. Firstly, at the time in question ā and ă differed phonologically from one another solely on the basis of long vs short. They may have differed from each qualitatively as well, but it is doubtful whether this would have been great enough for them to react differently to the same process. Secondly, it would be strange that one vowel and one alone would be exempt from a general development producing prothetic elements before all other initial vowels.

Equally difficult is the assumption that both ā and ă received either *v* or *j*. We might posit that forms like **ābl̆ŭkă* 'apple' and **ăkŭnă* 'window' both developed a *v*-prothesis, that is, **vābl̆ŭkă* and **văkŭnă* which after the vowel shift give **vablъko, *vokъno* and then **ablъko, *okъno* with the loss of *v* because the nature of the protected vowel had changed. If, however, this were so, then the original *v*, inherited from PIE, would also have to be dropped. We cannot assume **vokъno* > **okъno* without assuming **vozъ* > **ozъ* nor **vablъko* > **ablъko* without explaining the absence of a similar loss in *valiti* where *v* is original as it is in **vozъ*. In the vast majority of instances, forms with inherited *vă-* (traditionally *va-, vo-*) remain distinct from those with initial ă; these two syllable types do not merge. Initial *vă, vŏ* from PIE remain distinct to this day in Slavic as exemplified

[6] Without a preceding consonant *ъ* was articulated more strongly merging with *i*. Also it has been suggested that after *j, ĭ* never lowered to *ъ*. Therefore, the notation, perhaps, should be *jĭgo* instead of the traditional *jьgo*. Note the analogy with modern R *языкú [jьzykí], головá [gъlavá]* vs *обходúть [apxadít']* where the *schwa*-type vowels occur only after a consonant.

by **valiti* or **vozъ* whereas initial *ā, ō* > *ja* and initial *ă, ŏ* > *o* (without any apparent prothetic) of which **jablъko* and **okъno* well exemplify the general pattern. The assumption of a *v*-type prothetic before ă can be maintained only if we posit one that would not merge with inherited *v*, that is, something in the nature of *u̯* vs *v*. Thus, we would have **u̯okъno* vs **vozъ* — a bilabial glide vs a bilabial (or labiodental?) fricative.

Positing a prothetic *j* for ă would readily explain *j* before ā > *ja* as in **jablъko, *jagnę*, etc. but not before ă. Forms like **jăsĭlŭ* or **jăkŭnă* would have given rise to **josьlъ, *jokъno* but no such forms are attested, only **osьlъ, *okъno,* etc. without any trace of an assumed *j*. It is hardly possible to explain any loss of a *j* before *o* in terms of Slavic syllabic harmony. As we shall see, syllables of the type palatal + back vowel are adjusted by fronting the back vowel as in **jŭgŏ* > **jьgo*,[7] not by dropping *j*. Nor can we explain some supposed disappearance of *j* before *o* in terms of its being out of line with the syllabic structure of that time but its retension before *u* as in *junъ* < **jeunъ*.

Although it would seem highly improbable that any one vowel was exempt from the process of prothesis or that ā would be treated differently from ă, positing either *v* or *j* as the prothetic element for ă causes more difficulties than it solves. The prothetic consonant here must have been something else. In the case of *ĭ* or *ŭ,* as we have seen, the prothetic element was the consonantal approximation of the following vowel, and if the same took place with initial ă, the result would be some type of glottal fricative (or glide) for which the conventional symbol is ɦ. Such an element would have occurred only in this one specific environment and, thus, did not constitute a distinct phoneme but merely part of an allophonic variant of initial ă. As such it was easily subject to change or loss if the quality of the following vowel was alterned as during the shift of ă > *a, o*.

Since ā > *a* involved a change from a low back vowel to a more central one, it received the usual *j*- prothetic for nonback vowels. The fact that this *j* is relatively new and just developing in this environment is seen in the OCS documents where there is considerable vacillation in the presence or absence of *j* before *a*. Whether new *o* also received a new prothetic is by no means clear. Perhaps no new prothetic even developed. The time between the ă > *o* and the loss of the jers is not so great in linguistic history — two centuries at most. If one did develop, it must have been of the type suggested for ă in that it would have been nondistinctive, one that would not merge with an existing phoneme, and thus easily subject to loss once the change in the syllabic structure of Slavic made prothetics unnecessary. Articulatorily, it would likely be a consonantal approximation of *o*; any of *u̯,* ɦ or ɦ*u̯* are all plausible.

The existence of a *u̯*-type of prothetic is suggested by the following: PSl **osa* 'wasp' was inherited from PIE with *w* whereas **von'a, *von'ati* 'smell, give off a

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[7] See p. 116.

smell' was not.[8] That is, we would expect the modern dialects to give evidence for **vosa* vs **on'a* instead of vice versa. Such a development is probably best explained by assuming that every *o-* > *ų̯o-* and thus was occasionally confused with original *vo-* to which it was phonetically quite similar. Thus, **vosa* > **ų̯osa* and **ų̯on'a* > **von'a,* after which the *ų̯* in all forms was dropped after the lost of the jers.

All of NW Lekhitic shows the merger of *vo-* and *o-* into *vo* from the earliest documentation whereas any other areas with *o-* > *vo-* underwent this change much later. Either this is a very early innovation of NW Lekhitic or the retension of a Late PSl feature.

Positing a nonphonemic element as a prothetic is by no means a mere hypothetical construct, but such a phenomenon is clearly attested in LL. Here the nondistinctive *h*[9] replaced an earlier prothetic *w* before every initial *u*. This affected not only forms like *hulica* < *wulica* < **ulica* or *huž* < **wuž* < **ǫžь* where *w* was prothetic but also forms where *w* was etymological. We see this with *vy-* which previously had undergone the change *vy* > *wu* > *hu* not only in the prefix *vy-* but also in roots so that **vypiti* > *wupiś* > *hupiś,* just as in **vydra* > *wudra* > *hudra.*[10] The same substitution of *w* with *h* also occurred before *o* but only in those instances where the new *w* had not merged with the original *w*. This merging took place when *o* > *ó* (raised and more strongly labialized) after a labial or velar as in **woda* > *wóda* and also in **woraś* > *wóraś* (with new *w*) but the change *o* > *ó* was blocked wherever a labial or velar followed the *o*. Thus, there was no change in *wobjed* or *wokno*. In these latter cases we also observe *wobjed, wokno* > *hobjed, hokno* but not where *o* > *ó*.

The use of *h* before *u* (of all origins) and before *o* + velar or labial is clearly reflected in all the authors from the later seventeenth century who based their writing on the Cottbus dialect (S Central LL) as, for example, in the very influential translation of the *New Testament* of 1709. This was to remain the literary norm until the spelling reform of 1952.[11] Dialectal studies stemming from the mid or late nineteenth century clearly show that this literary usage of prothetic *h* still corresponded fairly accurately to the state of affairs not only in the Cottbus region but

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[8] Cp. Eng *wasp*, Lat *vespa*, Lith *vapsà* as opposed to Skr *aniti* 'breathe', Gr *ánemos* 'wind, breath', Lat *animus* 'spirit', Gothic *us - anan* 'to breath out' — all with *an*.

[9] LL does not have the change *g* > *h* as does UL or Cz; therefore, LL *h* has no function other than that of a prothetic. To this day in spoken LL, the presence of *h* in any given form is optional. Thus, for literary *hyś* < **iti* or *hyšći* < **ješče* is heard *yś, iś* or *hyś*; *yšći, išći* or *hyšci*. The very same happens with Germanisms, thus, either *hyca* or *yca, ica* < *Hitze*.

[10] UL also has *vy* > wu but not *wu* > *hu*. This latter change does not penetrate into the area where *h* is phonemic.

[11] One feature of this reform was to replace prothetic *h* before *u* or *o* with *w* so that the former *hobjed, hokno, hogeń, hupiś, humrěś, hurězaś,* etc. are now all written with *w* (*wobjed, wupiś,* etc.), but the purpose of this change was to bring LL orthography more into line with that of UL. It does not reflect the actual pronunciation of most speakers, the majority of whom now have no prothetic in these environments.

in most of LL. However, studies from the 1930s revealed that prothetic *h* has almost completely disappeared in the Cottbus region. Thus, in the vast majority of cases were found *upiś, ulica, okno, objed,* etc. without any prothetic at all. More recent and detailed studies not only confirm these earlier findings but also document the disappearance of *h* in almost all of LL. Examples like *hupiś* or *hobjed* are now very rare and sporadic whereas there is no dropping of *w* before *ó*. These developments illustrate both the reoccurring tendency to drop a prothetic element which is the consonantal approximation of the following vowel and also the use of a nonphonemic segment as a prothetic as well as the instability of the latter.

Concluding remarks

1. The open-syllable structure of PSl brought about the development of a prothetic consonant before all initial vowels. There is no reason to assume that any vocalic phoneme was exempted from this general process.
2. *ě̆* > *jě̆* (later *je, jě*); *ĭ* > *jĭ* (later *jь, ji*); *ŭ* > *vŭ* (later *vъ, vy*); *ă* > *ɦă*.
3. Both new *j* and *v* merge with the older *j* and *v* inherited from PIE but ɦ cannot merge with any other phoneme.
4. After the vowel shift ɦā, ɦă > ɦɑ, ɦo, the ɦ can be dropped for it is no longer the consonantal approximation of the following vowel: ɦa > *a*, ɦo > *o*.
5. New *a* > *ja* but new *o* > *o̯o* or ɦ*o̯o* or it may have remained without a prothetic.
6. The loss of weak *ъ, ь* ends the CV-structure. Prothetics can be dropped:
   (a) *ji, jь* > *i* except in Cz—UL area
   (b) *o̯o* > *o* (if *o̯* indeed existed) everywhere except NW Lekhitic
   (c) what applies to *o* (< *ă*) applies to *u* (< *ɑu̯*), *ǫ* (< *ɑn, mt*)

The origin of Late PSl initial syllables beginning with *j, v* or vowel. (Traditional notation).

1. *ji* < *ī, jī; ei̯, jei̯; jū; jai̯, joi̯*
   jь < *ĭ, jĭ, jŭ*
   je < *ĕ, jĕ, jŏ*
   jě̆ < *ē, jē, ai̯, oi̯*
   ja < *ā, ō, jā, jō*
   ję < *ĭ, ĕ* + *n, m* + *t*
   j + *ĭ, ĕ, ŭ* + *m, n* + *t*
   ju₂ < *eu̯, jeu̯, jou̯*
2. *vy* < *ū, vū*
   vъ < *ŭ, vŭ*

3. *o* < *ă, ŏ*
   ǫ < *ă, ŏ* + *n, m* + *t*
   u_2 < *au̯, ou̯*

4. *vo* < *vŏ, vă*
   va < *vā, vō*

Not all of the suggested PIE origins are attested or they are attested in very limited examples. They give rather the possible sources for each initial syllable in Late PSl. Group No. 1 specifies those instances where the new *j* of PSl (prothetic *j*) merges with *j* inherited from PIE (etymological *j*). Group No. 2 refers to those instances where prothetic and etymological *v* merge. Group No. 3 shows those segments which either developed no prothetic at all (not likely) or which developed a prothetic other than *j* or *v*. This prothetic merged with no existing phoneme of Late PSl and was later dropped at the time of the loss of *ъ, ь* or shortly thereafter. In any event, only these segments occurred without any prothetic in all the dialects resulting from the disintegration of PSl. Group No. 4 specifies those situations where *v* is almost always etymological. Some few examples may be doubtful but these are rare.

At some time before the end of PSl, a certain number of *jě* > *ja* under conditions not yet fully explained. For example, in **ēdmĭ* > **jěmь* 'I eat' the *ě* develops in all Slavic languages exactly as we would expect *ě* to develop in any noninitial syllable in the language concerned. On the other hand, the word **jěsla, *jěsli* < **ēdslā, *ēdslī* 'manger' contains the very same root but here *jě* develops exactly as would *ja*. Thus, Ukr *jim* vs *jasla,* SC *jêm, ȉjēm* vs *jasle,* P *jem* vs *jasła* etc. Only Blg and M have *ja* in both forms, that is, Blg *jasla* and *jam*. From **jědъ* (< **oi̯d-*) 'venom', the development *jě* > *ja* is found in E Sl, Blg, M, Sln, and Old LL[12] and the expected reflexes for *ě* are found in SC, Cz, Slk, UL and W Ukr. On the other hand, from **jězva* (< **oi̯zva*) the reflexes for *ě* are found only in Cz (*jizva* and older *jízva*) but everywhere else *jě* > *ja*. Similar contradictions are found with all instances of *jě-*.

The total number of examples is possibly too small for establishing any definite rules. However, it appears that *jě* > *ja* was an unconditioned sound change only in the Blg—M area. Elsewhere *jě* > *ja* is most consistently encountered only where *jě* was the bearer of fixed stress, that is to say, it had acute intonation.

From the above it is clear that at the end of the PSl period only *o, ǫ,* u_2 (< *au*) could occur in initial position without any prothetic element. These are joined by other vowels in various regions such as *o* < *je, u* < *ju* in E Sl; *a* < *ja* in Blg; *i* < *ji* everywhere except Cz, UL, Polabian. Any or all of these may develop new prothetic elements (*j, v, h*) later on. The new *u* < *v* + *ъ, ь* — in SC, Ukr, Br arises only when *ъ, ь* are in weak position. In Ukr and Br *u* of any origin is subject

[12] Polish *jad* is ambiguous; it could derive from both *jadъ* and *jědъ*.

to phonetically predictable alteration with *v-* or *w-*: ***vьdova, *vьs'e, *vъnukъ*** > SC ***ùdova, ùnuk***; Br ***udava, us'o, unuk.***

New prothetic elements in post-Proto-Slavic

o- > *wo/vo:* UL, LL, Br, dialectally in P and Cz, W Ukr
> *ho:* older standard for LL, N Ukr

ǫ- > *wę/wą:* P
> *wu/vu:* UL, LL, Ukr and Br when stressed
> *və:* Blg
> *ja:* M
> *hu:* older standard for LL, now *wu-*

u- > *wu/vu:* UL, LL, Br and Ukr when stressed
> *hu:* older standard for LL, now *wu-*

EXAMPLES WITH LATE PROTO-SLAVIC *o-, ǫ-, ǫd-, u-*

Late PSl	***oko**	***ognь**	***ostrъjь**	***ǫda**	***ǫtroba**	***ǫgorь**	***uxo**	***ulica**	***uzda**
UL	woko	woheń	wótry	wuda	wutroba	wuhor	wucho	wulica	wuzda
LL	woko	wogeń	wotšy	wuda	wutšoba	wugoŕ	wucho	wulica	wuzda
Ukr	oko	vohon'	hostryj	vudka	utroba	vuhor	vuxo	vulyc'a	vuzda
Br	voka	aɣon'	vostry	vuda	—	vuɣor	vuxa	vulica	vuzdečka
Cz	oko	oheň	ostrý	udice	útroba	úhoř	ucho	ulice	uzda
P	oko	ogień	ostry	wędka	wątroba	węgorz	ucho	ulica	uzda
Blg	oko	ogən	ostər	vədica	vətək	ǫtъkъ	uxo	ulica	juzda
M	oko	ogan	ostar	jadica	jatok	ǫtъkъ	uvo	ulica	uzda
SC	ôko	òganj	ôstar	ùdica	ûtrobica	ûgor	ûho	ùlica	ùzda
R	oko	ogon'	ostryj	udka	utroba	ugor'	uxo	ulica	uzda

COMMENTS

1. Until the spelling reform of 1952 most of the LL examples were written with initial *h* (***hoko, huda, hutšoba,*** etc.) and many textbooks continue to cite LL forms in the older orthography. The spoken norm usually has neither *h-* nor *w-*. (See p. 107.) However, some *h*-forms were retained as in ***howak*** (cp. P ***owak***).

2. In SW dialects of Ukr *w/v* before *o-* is quite consistent whereas *h* predominates in the northern dialects. The standard language as a rule maintains the traditional spelling without any prothetic before *o-* (***oko*** in standard Ukr as opposed to ***woko*** in SW but ***hoko*** in N). Occasionally prothetics are

permitted in the literary languages — sometimes with *h* from the N (*hostryj, horix*); sometimes with *v* from the SW (*vohon'*). Prothetic *v* before stressed *u* is fairly consistently represented in the standard language.

3. Prothetic *v* before *o-* in Br occurs in the majority of Br dialects and is consistently represented in the literary language but only with stressed *o-* since *o* > *a* elsewhere, thus, *aknó* (nom. sing.) but *vókny* (nom. plural). Influenced by the oblique cases, the third person pronouns have a prothetic *j*: *jon, jana, jano, jany* <**onъ,*ona,*ono,*ony*.

4. In central dialects of Cz and all of W and SW P, *o-* consistently receives a *u̯* or *w*. This prothetic rarely merges with etymological *v*.

Loss of prothetic elements in post-PSl and their possible replacement with new ones

je > *o*: all E Sl then develops as P Sl *o*
> *e*: Blg, M
> *je* generally retained elsewhere

ję > *e*: Blg
> *e/ja* M
> *j* retained elsewhere but with various reflexes for *ę*

ju- > *u*: all E Sl then develops as u_2 < *au̯*
> *ju* usually retained elsewhere

ja- > *a/ja*: Blg
> *ja* retained elsewhere

ji- > *ji* retained: Cz
> *ji* or *hi* (later): UL
> *ji* or *hy* (later): LL
> *i*: elsewhere

jь- > *je* (strong *ь*): Cz, UL, LL
> *j* or *ø* (weak *ь*): Cz, UL, LL
> *i* elsewhere

EXAMPLES WITH LATE PROTO-SLAVIC *je-, ję-, ju-, ja-, ji-*

Late PSl	**jezero*	**językъ*	**jęknǫti*	**juxa*	**jagnę*	**jilъ*	**jinъ*
UL	jězor	jazyk	—	jucha	jehnjo	jił	jiny*
LL	jazoro	jězyk	—	jucha	jagnje	—	jiny*
Cz	jezero	jazyk	jeknouti	jícha	jehně	jíl	jiný
P	jezioro	język	jęknąć	jucha	jagnię	ił	inny
R	ozero	jazyk	jaknut'**	uxa	jagn'ata	il	inoj
Br	vozero	jazyk	—	juxa	jaɣn'a	—	inšy
Ukr	ozero	jazyk	—	juška	jahn'a	il	inšyj
Blg	ezero	ezik	ekna	juxa	agne	il	inakəv
M	ezero	jazik	ekne	jufka	jagne	—	inakov
SC	jȅzero	jèzik	jȅknuti	júha	jȁgne	ĩlovača	ĩnāk

* These forms are archaic having been replaced by *hiny, hyny*
** dialectal

COMMENTS

— The loss of (or failure to develop) a prothetic *j* before *a-* is more frequently attested in OCS than in modern Blg that is, OCS *ablъko, agoda, ajьce, aviti sę* (also *javiti sę*) vs Blg *jabəlka* (*abəlka* dial.), but *jagoda, jajce, jav'ə se.*

— *ju-* > *u-* in E Sl is an unconditioned change but *je-* > *o-* is not. Modern E Sl forms such as Ukr *juška, junak* or R *junoša* were introduced later as borrowings either from OCS or P; the *j*-less variants are attested almost always in earlier documentation.

The *jotation* of consonants. Since *jot* (or *yot*) is the name given to the palatal fricative (represented with a *j* in Slavic linguistics but occasionally with *y* as in Eng *yet, year,* etc.), *jotation* then refers to the action of this sound on a preceding consonant. It is another manifestation of the PSl tendency to simplify syllables in that a consonant and the following *j* merge to form a new segment. In PSl every consonant except *jot* itself undergoes *jotation*; this applies also to those consonant clusters which still existed.[13]

[13] Colloquial Eng also provides us with several clear examples of jotation, thus, in quick speech: *will you* [w+l'ə], *can you* [kæn'ə], *did you* [didžə or didžjə], *can't you* [kænčə].

gj *zj*	>	*ž*	*nj* *lj*	>	*n'* *l'*	*tj* *gtĭ*	>	*t'*	*bj* *pj*	>	*bl'* *pl'*
xj *sj*	>	*š*	*rj* *dj*	>	*r'* *d'*	*ktĭ*			*vj*	>	*vl'*
						kj	>	*č*	*mj*	>	*ml'*
skj *stj*	>	*šč*	*snj* *znj*	>	*šn'* *žn'*						
zgj *zdj*	>	*ždž*	*slj* *zlj*	>	*šl'* *žl'*						

The phenomenon of *jotation* presents us with several difficulties in Slavic historical linguistics. First of all, let it be emphasized that in the majority of instances *jotation* produces identical results in all Slavic languages, and this indicates that *jotation* was a fairly ancient process, one having arisen before the breakup of PSl into dialects. However, there are two major exceptions which produce different results in various regions of Slavic. These are:

— the epenthetic *l* resulting from the *jotation* of labials
— the reflexes for the *jotation* of *t* and *d*.

The situation with the *jotation* of labials is as follows: In the W Slavic languages, epenthetic *l* is not retained in all the environments where we have reason to expect it. More precisely, it is attested within roots but not at morpheme boundaries. Thus, comparative linguistics allows us safely to reconstruct the PSl root for "spit, spew" as **pjŭv-*. Every Slavic language to this day preserves the epenthetic *l* in this and similar roots. However, in a form like **zĕmjā* the situation is different, for the *j* here occurs at a morpheme boundary, **zĕm* being a root morpheme, and *a* a case ending. The same sound law that produces an epenthetic *l* in **pjŭv-* should, therefore, produce the same result in **zĕmjā,* but this is not the case. Here the epenthetic *l* is attested only in E Sl, Sln and SC.

Language	*pjŭv-*	*zĕmja*
R	плевать	земля
Ukr	плювати	земля
Br	пляваць	зямля
Sln	pljuváti	zémlja
SC	pljùvati	zèmlja
M	плука	земја
Blg	плюя	земя
P	pluć	ziemia
Cz	plít	země
Slk	pl'ut'	zem (*coll.* zema)
UL	pluwać	zemja
LL	pluwaś	zemja

The question arises whether those languages not having epenthetic *l* at morpheme boundaries ever possessed it. In other words there are two possibilities: (1) Epenthetic *l* failed to develop at morpheme boundaries in certain regions of Slavic; (2) Epenthetic *l* arose in every instance where labial + *j* existed but was later lost at morpheme boundaries. The preponderance of evidence would indicate that the second possibility is closer to the truth. One such piece of evidence is the testimony of OCS documents originating in the M—Blg area. The older the document, the more consistent is the use of epenthetic *l*. In W Sl the situation is not so clear, for epenthetic *l* in any consistent manner is unattested even in the earliest documentation. Nevertheless certain isolated examples of epenthetic *l* do in fact occur.

Cz: *Davle, Vidovle* (place-names)
Slk: *Ryblany, Chevl'any* (place-names attested in the XIV-XV centuries), now *Rybany, Chlievany*
P: *kropla, przerębla, grobla* (also *grobia* in Old P)

The second major problem connected with *jotation* is that involving the reflexes of *tj* and *dj*.

tj > *č:* E Slavic, Sln
tj > *c:* W Slavic
tj > *ć:* SC
tj > *št:* Blg, OCS
tj > *ќ:* M

dj > *ž:* R
dj > *dž, ž:* Ukr, Br
dj > *z:* Cz, UL and LL
dj > *dz:* P, Slk
dj > *žd:* Blg, OCS
dj > *đ:* SC
dj > *j:* Slv

The mystery is why are there so many varied reflexes of *tj* and dj when all other evidence indicates that *jotation* is a process predating dialectal divisions in PSl. Two of the most plausible explanations are the following:

1. The initial phase in the *jotation* of *t* and *d* was uniform in PSl: *tj* > *ć* (a voiceless palatal affricate) or *t'* (a palatodental stop), *dj* > *đ* or *d'* (the voiced counterparts of *ć* or *t'*). At a later date, during the breakup of PSl into dialects, *ć* and *đ* (or *t'* and *d'*) developed differently in the various regions. In most instances *ć* and *đ* merged with an existing phoneme. Only in SC and M *ć* and *đ* remain as separate phonological segments.

2. *Jotation* began in the predialectal period of PSl, but the final stage (whereby the *j* is dropped) took place during the period of dialectal division, that is, *sj* > *šj* > *š*. Thus, in the case of *tj, dj* the phonetic results of *jotation* would merely remain predictable variants of */t/* and */d/* until *j* is eliminated, that is, *tj* > *t'j* or *ćj* (*t'* or *ć* being an allophone of */t/*). When *j* is finally eliminated, the *t'* or *ć* must become either a separate phoneme (as in SC) or merge with an existing phoneme to which it was phonetically very similar.

Another problem related to *jotation* of *tj* is that *gtĭ* and *ktĭ* always undergo the same developments as does *tj*. As yet it has not been possible to demonstrate

with any certainty the steps by which *gtĭ, ktĭ* would merge with *tj*. Notice that this applies to *gt, kt* only when followed by *ĭ* (later *i, ъ*) and also to $i_2 < e\dot{i}$. In any event, as the examples show, whatever the reflex of *tj* may happen to be in any given area, it will be the same as the reflex for *gtĭ* and *ktĭ*.

PSl	*R*	*Ukr*	*P*	*Cz*	*Slk*	*Sln*	*SC*	*Blg*	*M*	*OCS*
**světja:*	свеча	свіча	świeca	svíce	svieca	svẹ́čа	svijèća	свещ	свећа	svěšta
**noktь:*	ночь	ніч	noc	noc	noc	nọ̑č	nȏć	нощ	ноћ	nošть
**pekti:*	печь	печи	piec	péci	piect'	péči	pèći	—	—	pešti
**mogti:*	мочь	мочи	móc	moci	môct'	móči	mòći	—	—	mošti

Bulgarian and M have completely lost the infinitive, and R, P and Slk have lost the final vowel. The *t'* in Slk *piect', môct'* is a later development. Ukr *печи, мочи* are now considered dialectal having been replaced by *пекти, могти.*

The first palatalization of velars. Along with the law of open syllables and the tendency to simplify consonant clusters, another tendency, known as synharmonism was developing. This means that in any given syllable the consonant(s) and the following vowel are brought into harmony whereby a front vowel will palatalize a preceding consonant, and a back vowel will velarize one. In this way the consonant and its following vowel tend to be articulated as far as possible in the same points of the speech tract.

This type of syllabic harmony is not possible in the case of velars (PSl *k, g, x*) followed by front vowels. A velar by definition is articulated in the region of the velum whereas a front vowel must be formed in the front of the speech tract. This articulatory contradiction is corrected by having the velar conform to the front vowel which followed it. That is, the velars are shifted into the palatal region, hence, the term "palatalization of velars". Thus, by this process *k* > *č, g* > *ž, x* > *š* (also the clusters *sk* > *šč, zg* > *ždž*) wherever the velar was followed by any front vowel. The results of this palatalization are well attested and uniform in every Slavic language except for the clusters *šč* and especially *ždž* which later underwent various developments in the individual languages.

At the time of the first palatalization, PSl still possessed the two-level vowel system (pp. 97-9). This means that the front vowels in existence then were *ĭ* and *ӕ̆* (or *ě̆*) but our examples are in the traditional notation in which the front vowels are *i, ъ, (< ĭ), e, ě (< ӕ̆* or *ě̆)* and *ę* (the front nasal) which in fact did not exist at the time; a front vowel + *m/n* + consonant was still tolerated then. The front diphthongs *ei̯* and *eu̯* also caused the first palatalization.

**slug*	+	*iti*	> **služiti*	**krik*	+	*ěti*	>	**kričati*
**sněg*	+	*ьnъ*	> **sněžьnъ*	**leg*	+	*ěti*	>	**ležati*
**lěsk*	+	*ina*	> **lěščina*	**rux*	+	*ěti*	>	**rušati*
**rękъ*	+	*ьka*	> **rękъka*	**pek*	+	*ete*	>	**pečete*

**mǫk*	+	*iti*	> **mǫčiti*	**mog*	+ *ete*	>	**možete*
**sux*	+	*iti*	> **sušiti*	**dux*	+ *e*	>	**duše*
**grěx*	+	*ьnikъ*	> **grěšьnikъ*	**vъnuk*	+ *ę*	>	**vъnučę*
**mozg*	+	*ьkъ*	> **moždžьkъ*	**log*	+ *ętь*	>	**ložętь*

Note that *ě* after having palatalized a preceding velar, backs and eventually merges completely with *a*.

The effects of this first palatalization are still evident in all modern Slavic languages. They are seen in the alternation *k* - *č*, *g* - *ž*, *x* - *š*. By a later change, however, *g* > *h* in Cz, Slk, UL, Ukr and *g* > ɣ in Br so that in these areas the alternation is *h* - *ž* or ɣ - *ž* but we are still dealing with the same process.

Note the workings of the first palatalization in modern Ukr:

1. Vocative singular masculine: velar + *e* (vocative ending)
   чоловік, Бог, пастух + *e* > *чоловіче, Боже, пастуше*
2. Formation of adjectives: velar + *ьn* (adjectival formant)
   бік - бічний, друг - дружній, сміх - смішний
3. Formation of verbs: velar + *iti* or *ěti* where *i* > *y* and *ě* > *a*
   велик - величати, круг - кружити, сух - сушити, рук - ручити, батіг - батожити, верх - вершити, вереск - верещати, блиск -блищати. Note *i* > *y* as a specifically Ukr change whereas *ě* > *a* is PSl.
4. Formation of diminutives: velar + *ьk* + *ъ*, *a* or *o*
   кожух - кожушок (ьkъ > *ek* > *ok), старуха - старушка, рука -ручка, молоко - молочко, бик - бичок, книга - книжка, стіг - стіжок, віск -вощина* (< **vosk* + *ina*)

There are no clear examples of *zg* > *ždž* in Ukr, but compare the P *rózga - różdżka* (< **rožd'ьka* < **rozgьka*) or *miazga - miażdżyć* (< **mězgiti*). These are but a few examples of how the first palatalization still operates in modern Slavic.

Fronting of back vowels after palatals. In connection with the developing tendency to synharmonism, it now became impossible for a palatal consonant to be followed by a back vowel. To the palatals belong any segment resulting from *jotation* or the first palatalization.[14] The situation is corrected by changing the back vowel to its front correspondent, that is, high back > high front, low back > low front.

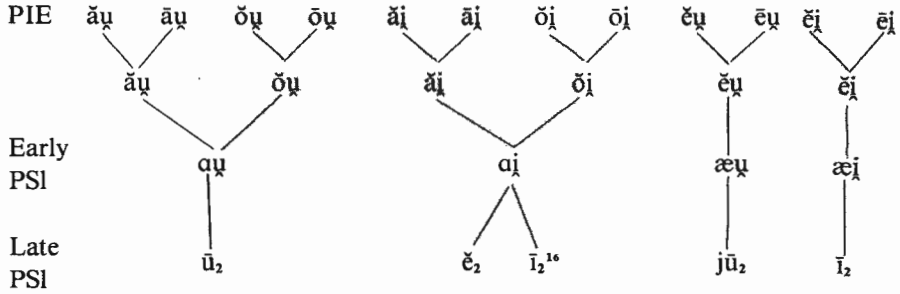
**sjūteį* > **šūtī* > **šiti; *pjŭvāteį* > **pl'ŭvātī* > **pl'ĭvati* > **pl'ьvati; *poljo* > **pol'o* > **pol'e; *zemjaį* > **zeml'aį* > **zeml'eį* (later **zeml'i*);

[14] Note that it is not necessary to mark *č, š, ž, t'* or *d'* as being palatalized, for they did not exist except as palatalized segments. However, *l, r, n* occurred in both a palatalized and nonpalatalized variant. Therefore, the soft *l, r, n* must be marked as such.

**kŏnjomъ > *kon'omъ > *kon'emъ; *jŭgo > *jĭgo > *jьgo; *jūstъ > *jistъ*[15]

The last two forms later lose *j-* in all areas except Cz and perhaps UL.

Monophthongization of all diphthongs. The initial phase in the development of open syllables did not touch the semivowels (*i̯, u̯*) or the sonants (*r, l, n, m*). Therefore, syllables (in traditional notation) of the type *teri̯a, tai̯a, teu̯a, tau̯a, terta, tenta, telta* were still possible, whereas *tepta > teta, tegta > teta, tetna > tena, tedta > testa.* Now syllables ending in a semivowel (that is, diphthongs) were also simplified whereby the vowel (the syllabic nucleus) and the off-glide (the semivowel) merged together to form a single long vowel, that is, a monophthong. At this period in the history of Slavic, there existed four diphthongs of the type *ei̯, eu̯, ai̯, au̯,* the origins and further reflexes of which are as follows:



The diphthongs of line 3 are the same as *au̯, ai̯, eu̯, ei̯* in the traditional notation, and their monophthongization is treated in various ways in the textbooks. Thus, we find such formulae as *ŏu̯, ău̯ > u₂* or *ou̯, au̯ > u₂*, but this notation merely gives the PIE sources for PSl *u₂*. It is, nevertheless, well established that at the time of monophthongization PSl possessed only one *au̯*-type diphthong, and this is the immediate source of PSl *u₂*.

It must be emphasized that monophthongization occurs only when the diphthong was followed either by a consonant or by a pause (final position) but not when followed by a vowel. In the latter instance the semivowels functioned as a consonant, not as an off-glide. This is indicated by using the transcription, vowel + *j* or *v* instead of vowel + *i̯* or *u̯*.

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[15] This example implies that Lat *iūstus* 'justice' and Slavic *jistъ* (or *istъ*) 'the same, actual, true' are cognates, but not all are agreed. However, if such a root existed in PSl it would definitely develop as shown.

[16] See final note on this section, p. 119.

For example, the PIE root for "drink" occurred in two ablaut grades in PSl **peį* and **poį*. From these we have the infinitives **peįteį* > **piti* vs **poį + i + tei* = **pojiti*. Since *į* here = *j*, the whole form then assumes the required PSl structure of CVCV, and thus no change is desired. Further examples are **paįteį* > **pěti* vs **paįǫ* > **pějǫ* (without change) > **pojǫ* (note R *немъ, пою*); **koųteį* > **kuti* vs **koų + al'ъ* > **kovalъ*.

The *eį* undergoes a special development when followed by a vowel. Based on the examples above, we would expect *eį* + V > *ej*V but instead of this we find *ĭj*V (later *ьj*V). That is, **peįǫ* > **pĭjǫ* > *pьjǫ* (OCS); **treįes* > **trĭje* > *trьje* (OCS). There are two other conventions used in transcribing the diphthongs and their reflexes, all of which require a few words of explanation.

Firstly, the use of *j* in the reflex of *eų* indicates that the monophthongization of *eų* also produced jotation in exactly the same way and with the very same results as etymological *j*, thus, **teųd-* > **tjū₂d-*. *tj* then develops exactly the same as any other *tj*, as for example in **světja*. This u_2 never fronts after palatals as does $ū_1$. Note the difference **keųdo* > **čeųdo* > **čudo* vs **sjuti* > **šuti* > **šiti*.

Secondly, the use of the 2 as a subscript with $ĕ_2$, $ī_2$ or $ū_2$ is a tradition of long standing. It means simply that the sound in question is secondary, that is, not inherited directly from PIE but developed later as a result of purely PSl processes. The use of a symbol like $ū_1$, therefore, means the opposite or that this segment was inherited directly from PIE. In most instances, however, the one-subscript is omitted; it is then understood that the segment in question is original. In Slavic $ĕ_2$ merges completely with $ĕ_1$ and $ī_2$ with $ī_1$, thus, **vъ vēraį* > **věrě₂* (OCS вѣ вѣрѣ), **žīteį* > **žiti₂* (OCS *жити*); **žīvaį* > *živi₂* (OCS *живи*). The 2-subscript indicates nothing more than a difference in origin, not in phonology.

As the spelling of OCS indicates there was no distinction between the original (or etymological) *ě* (or $ĕ_1$) and secondary *ě* (or $ĕ_2$) or between *ī* and $ī_2$. The same applies to all Slavic languages; nowhere do we find a separate development for *ě* as opposed to $ĕ_2$, or for *ī* as opposed to $ī_2$. Once they have merged, they thereafter share the same developments although these developments may differ greatly from region to region.

As opposed to *ě* and $ĕ_2$ or *ī* and $ī_2$, *ū* and $ū_2$ never merge because *ū* > *y*, and this causes some difficulty in reconstructing the stages leading to the final result. There are generally three possibilities put forward.

1. The change $ū_1$ > *y* took place before *aų* > $ū_2$; therefore, $ū_2$ was not affected by the process which affected $ū_1$, that is, **sūnaų* > **synaų* > **synu* (voc. sing.).

2. *aų* did not immediately develop to $ū_2$ but through an intermediate stage like *ō* and then later to $ū_2$. $ū_1$ > *y* took place before *ō* > $ū_2$; therefore, $ū_1$ > *y* would not affect *ō*, that is, **sūnaų* > **sūnō* > **synō* > **synu*.

3. As in No. 1, the explanation also assumes that *aų* > $ū_2$ without an intermediate stage, but differs from No. 1 in that it assumes an intermediate stage for *ū*, before it developed to *y*. One commonly encountered suggestion is that *ū* >

uį, then later *uį* > *y*. This would explain the spelling *ъı*, that is, *ŭ* + *į* for *y* in the Glagolitic. Others, however, suggest that $\bar{u}_1$ remained a high back monophthong but different in some way from $\bar{u}_2$. This difference is, of course, the one already mentioned; PSl *ū* was a high back vowel without distinctive rounding. The reflex of *aų* was, however, distinctively round so the two never merged, but the phonetic details are perhaps uncoverable.

Although explanation No. 1 is the one most commonly encountered in the handbooks, it has two serious drawbacks. Firstly, much of the evidence at our disposal indicates that monophthongization (*aų* > $\bar{u}_2$) is an older process than $\bar{u}_1$ > *y* whereas this explanation must assume the opposite. Secondly, if we accept this explanation we must assume that *ū* > *y*, but long before *aų* > *u*, this means there existed a vocalic system without any *u*-type vowel, that is, a high back vowel lacking even nondistinctive rounding, and this is an usual situation.

As shown above, *aį* develops both to $\check{e}_2$ (in the majority of cases) and $\bar{\imath}_2$; but the exact reason for this has never been fully established. $\bar{\imath}_2$ < *aį* occurs only in final position and only in three morphological categories.

1. masculine nominative plural of *ŏ*-stem nouns:
   **stolaį* > **stŏlī*$_2$ (OCS *столи*)
2. masculine nominative plural of adjectives and pronouns;
   **novaį* > **novī*$_2$ (OCS *нови*)
3. 2nd and 3rd person singular imperative:
   **nesaį* > **nesī*$_2$ vs **nesaįte* > **nesĕ*$_2$*tě* (OCS *неси* vs *несѣте*).

In the above discussion, a minor inaccuracy has been permitted. It was stated that *aį* > $\check{e}_2$ which merges with etymological *ě* or $\check{e}_1$. It would be more accurate to indicate that *aį* first became a long low front vowel which merged with the long low front vowel already existing in the PSl two-level vowel system (pp. 97-8). It was then at a later date that this vowel developed to *ě*. However, the formula *oį*, *aį* > $\check{e}_2$ is a firmly established tradition in all the handbooks, instead of the more accurate *aį* > æ$_2$ > *ě*.

CHAPTER VII

Phonological Developments in the Period of Disintegration

General remarks. Here are discussed those processes which led to the dialectal breakup of PSl and the emergence of separate Slavic languages. It is generally accepted that the first of these was the so-called second palatalization of velars which could have taken place no earlier than in the sixth century AD. After this date, PSl continues to experience the same linguistic innovations but the results are usually not uniform as before. True, some processes continue to give identical results as in the previous period, and PSl cannot be considered as having come to an end until such processes cease. Nevertheless, the majority of phonological developments in this period gave different reflexes in different areas thus giving rise to dialects.

The second palatalization of velars. This process was a direct result of the loss of the diphthongs and more specifically the development of *aį* > *ě₂, i₂*. Thus, before monophthongization syllables like *kaį, gaį,* or *xaį* were perfectly in accord with the general syllabic structure of PSl of that time. However, the change *kaį* > *kě₂* or *ki₂*, etc. brought into existence syllables which were not tolerated in PSl, namely, velar + front vowel. Such a syllable was not in keeping with the overall tendency toward synharmonism. This contradiction is corrected by palatalizing the velars as it was at the time of the first palatalization, only this time the results were different and not uniform giving rise to the earliest dialectal divisions.

These dialectal differences concern mainly *x* > *š* in all of W Sl but *s'* elsewhere and also the sequences *kv, gv* + *ě₂*, which in W Sl remained unchanged but elsewhere underwent the same changes as if *v* were not there (examples below). One would, therefore, expect to find a parallel development with *xv* > *s'v* in S Sl and E Sl but unpalatalized in W Sl. This logical assumption is, in fact, supported by OCS *vъlsvi* < **vъlxvi,* but aside from this single instance, there are no other examples of the sequence *xv* + *i₂* or *ě₂*. Therefore, any further discussion of *xv* is pointless.

Traditionally it has been believed that *g* > *dz* as an initial stage everywhere with a later simplification of *dz* > *z'* or *z* which is what we find today in most areas of Slavic. This would mean that *dz* of Lekhitic (except Slovincian) and the Ohrid dialect of W M are archaic features. St. Cyril created a special symbol (with

the numerical value *No. 8*) for this sound[1] but whether it was to stand for *dz* or *z'* is not known. In any event, the Glagolitic documents often confused this symbol with the ordinary *z*-symbol, and the Cyrillic documents with some rare exceptions never developed symbols to distinguish *z* from the reflexes of *g* by the second (and third) palatalization. This would indicate a merger of this reflex with *z* at a fairly early date, at least, in the Macedonian—Bulgarian area, and all the other areas which experienced the same merger did so before the earliest documentation. Nevertheless, what evidence there is does not contradict the view that initially *g* > *dz* and the OCS examples are cited with this reflex.

Remember that *c* and *dz* were always soft but are not marked as such because there are no hard *c* or *dz* with which they could be confused. On the other hand, the new *s'* and *z'* must be marked as soft to distinguish them from hard *s* or *z*.

EXAMPLES WITHIN ROOTS

Proto-Slavic			*OCS*	*Other Languages*
*kaĵlъ	>	*kělъ	cělъ	*P* cały, *Cz* celý, *Ukr* cilyj
*kaĵnā	>	*kěnā	cěna	*P* cena, *Sln* céna, *Ukr* cina
*kaĵstā	>	*kěstā	očěstiti	*Cz* cesta, *Sln* césta
*gaĵlŏ	>	*gělŏ	dzělo	*Sln* zelọ̑
*xaĵrъ	>	*xěrъ	—	*Sln* sẹ̑r, *R* seryj, *Ukr* siryj *with* s *as opposed to* š *in Cz, Slk* šerý, *P* szary
*kvaĵtъ	>	*květъ	cvětъ	*Blg* cv'at, *SC* cvêt, *R* cvet *as opposed to* kv *in Slk* kvet, *P* kwiat, *Cz* květ, *UL and LL* kwět
*gvaĵzdā	>	*gvězdā	dzvězda	*SC* zvézda, *R, Blg* zvezda, *P* gwiazda, *Cz* hvězda *as opposed to* gv *in P* gwiazda, *LL* gwězda, *and later* gv > hv *in Cz* hvězda, *Slk* hviezda, *UL* hwězda.

EXAMPLES AT MORPHEME BOUNDARIES

The operation of the second palatalization at morpheme boundaries brought into existence a new set of alternates: *k* with *c*, *g* with *dz* or *z'*, *x* with *š* in W Sl and *x* with *s'* elsewhere. Because of its early attestation, the greatest number of these alternations is attested in OCS, but every language except R retains some remnants of it in its literary form — often more in the dialects. Below are given the major morphological categories in each language which retain it.

[1] This also applies to the reflex of *g* by the third palatalization. See p. 57, comment No. 1. Note also that St. Cyril devised no special symbol for *s'* < *x*.

(a) Locative and dative singular of *ā*-stems (fem. nouns): PSl ending = **ě₂* < PIE **aį*

OCS: *rǫka - rǫcě, strěxa - strěs'ě, noga - nodzě* or *noz'ě*
P: *ręka - ręce, strzecha - strzesze, noga - nodze*
Cz: *ruka - ruce, střecha - střeše, noha - noze*
UL: *ruka - ruce, mucha - muše, noha - noze*
LL: *ruka - ruce, mucha - muše, droga - droze*
Ukr: *ruka - ruci, strixa - strisi, noha - nozi*
Br: *ruka - rucę, straxa - strase, naɣa - naze*
SC: *rúka - rúci, strȅha - strȅsi, nòga - nòzi*

(b) Locative singular of *ŏ*-stems (masc. and neuter nouns): PSl ending = **ě₂* < **aį* < PIE **oį*

OCS: *ablъko - ablъcě, grěxъ - grěs'ě, brěgъ - brědzě* or *brězě*
Ukr: *jabluko - jabluci, kožux - kožusi, bereh - berezi*
Br: *malako - malacę, kažux - kažuse, beraɣ - beraze*
Cz: *potok - potoce, břicho - břiše,* but *břeh - břehu*
UL: *mloko - mlóce, brjuch - brjuše, brjóh - brjoze*
LL: *mloko - mloce, proch - proše, brjog - brjoze*

The Cz, UL and LL examples are really remnants and not part of a consistent system. In the vast majority of cases, *-u* is the loc. sing. ending for nouns ending in a velar and this requires no alternation. Seldom is the older *e* (< *ě*)-form obligatory but remains as a less common alternative to the *u*-forms. The same is true of Br but more alternating forms remain than in W Sl.

(c) Locative plural of *ŏ*-stems (masc. and neuter nouns): PSl ending = *ěxъ* < **aįxъ* < PIE **oįsŭ*

OCS: *vlъkъ - vlъcěxъ, grěxъ - grěs'ěxъ, brěgъ - brědzěxъ* or *brězěxъ*
Cz: *vlk - vlcích, hřích - hříších, břeh - březích*
SC: *vûk - vûcima, òrah - òrasima, kòvčeg - kòvčezima*

(d) Nominative plural of *ŏ*-stems (masc. nouns): PSl ending = **i₂* < **aį* < PIE **oį*

OCS: *vlъkъ - vlъci, grěxъ - grěsi, vragъ - vradzi* or *vraz'i*
SC: *vûk - vûci, grêh - grési, vrâg - vrâzi* and *vràgovi*
Blg: *vəlk - vəlci, kožux - kožusi, vrag - vrazi* (poetic)
M: *volk - volci, uspex - uspesi, beleg - belezi*
P: *rolnik - rolnicy, mnich - mnisi, szpieg - szpiedzy*
Cz: *vlk - vlci, ženich - ženiši, soudruh - soudruzi*
Slk: *vojak - vojaci, ženích - ženísi* but *súdruh - súdruhovia*
UL: *rěznik - rěznicy, čornuch - čornuši* but *wróh - wrohojo*

In Cz the alternations shown above are limited to nouns representing masculine animate beings; in P, Slk and UL only nouns signifying male humans are subject to it. From the languages cited above OCS, P, Cz and UL have the same alternations in the nominative plural of adjectives modifying masculine nouns.

(e) PSl ending = **i₂* < **aį* (short form) or **iji* (long form)

OCS:	*vysokъ - vysoci,*	*suxъ - sus'i,*	*mъnogъ - mъnodzi* or *mъnoz'i*
P:	*wielki - wielcy,*	*głuchy - głusi,*	*drugi - drudzy*
Cz:	*hezký - hezcí,*	*hluchý - hluší,*	*drahý - drazí*
UL:	*wulki - wulcy,*	*hluchi - hluši,*	*drohi - drozy*

(f) Imperative of verbs with roots in *k, g*: PSl ending = **i₂* < **aį* (sing.) but **ě₂* < **aį* + *mъ/ь, te* (plural). The first example in each set is the first person singular for OCS and Cz; the *l*-participle (masc. sing.) for SC and Sln.

OCS:	*rekǫ - rьci, pomogǫ - pomodzi* or *pomozi*
SC:	*pȅkao - pèci, strȉgao - strȉzi*
Sln:	*pę́kel - péci, strîgəl - strízi*
Cz:	*peku - pec, pomohu - pomoz*

Notice that in (d) and (e) P and Slk have *x* > *s* in spite of the fact that in W Sl we expect *x* > *š* (by 2nd and 3rd palatalization), but in (a) P has the expected *x* > *š*. The P examples in (d) and (e) are the result of later developments; as late as the seventeenth century forms like *mniszy, głuszy,* etc. were still in use. The Slk situation is more complicated: *x* > *s* only in Central Slk and only at a morpheme boundary but *x* > *š* within a root (cp. *šerý, všetko*). This and other "jugoslavisms" give us some grounds to think of Central Slk as some sort of bridge between S Sl and W Sl.

In the discussion of the second palatalization of velars, we have presented the traditional view that this process proceeded identically in both E Sl and S Sl. More recent research, especially in the field of dialectology, has forced us to revamp this theory.

Firstly, the existence of Ukr and Br forms containing *kv* in the root for "flower, blossom" (that is, *kvitka, kvetka,* etc.) have long been attributed to P influence which is logical enough given the geography and history of these areas. However, nonpalatalized *kv*-forms (and *gv*-forms) have also been discovered in R dialects where P influence is out of the question. It would seem that the palatalization of *kv, gv* in E Sl was not an overall process but that both palatalized and nonpalatalized forms seem to have existed almost in free variation.

Secondly, certain data from the Pskov and Novgorod area of NW R indicate that the second palatalization never operated in this region which at the time under discussion was the most remote corner of the Slavic speaking world. If this process did operate there, it operated somewhat later with diminished regularity or the forms involved spread northward and were accepted one at a time. The evidence for this may be summarized as follows:

1. Foreign borrowings into Slavic at this time were subject to the second palatalization (see below) if the necessary conditions prevailed. This is not so in the northern part of E Sl. Here velars in borrowings are either left unpalatalized or undergo the first palatalization. Thus, from the same Finnic root, **sergjärv-*, we have *Seliger* (name of a lake) but *Seližarovka* (name of river). From Scandinavian **skillingr* 'coin' we find *ščьl'agъ* (attested in the chronicles) with *sk* undergoing the first palatalization and *g* resisting the third but *'a* < *ę* < *ing* is exactly what would be expected.

2. Modern R shows no trace of the second palatalization at morpheme boundaries whereas Ukr and Br retain it to this day in the locative and dative singular of feminines and the locative singular of masculines and neuters. Thus, *ruka* has the following locative singular forms: *ruci* (Ukr), *rucė* (Br) but *ruke* (R). Traditionally it has always been argued that *k* in this form (or any velar in similar circumstances) has been reestablished on the basis of all other forms where the velar would normally remain unchanged. This is logical enough, but there are several problems. One of these is the evidence of written sources. From Novgorod we have the so-called birch-bark documents, a large and very interesting collection of personal letters, notes, business receipts, etc. — all written by people who were not trying to compose literary work and were without training in OCS. Therefore, they reflect the language as spoken, and some of the oldest stem from the late eleventh century. Even in the oldest layer of these birch-barks there is no trace of the second palatalization at morpheme boundaries in any of the categories where it would normally be expected. The usual dating for the second palatalization as being within the sixth/seventh centuries is based on data from further south, but it could not have reached the remote north before the end of the seventh century at the very earliest. This would mean that between the eighth and eleventh centuries the second palatalization had sufficient time not only to take place but also to disappear completely. In terms of linguistic change this is lightning tempo. Stranger still is the fact that the second palatalization (at morpheme boundaries) was eliminated in all categories and to such an extent that no dialect however remote retains even a remnant of it. Such a thing is unattested elsewhere.[2] It may, therefore, be more logical to explain R forms like *v ruke, na noge,* etc. not by arguing that the velar was reestablished but that the velar was never lost.

3. In spite of all that has just been said about resistance to the second palatalization at morpheme boundaries in N Old R, it is attested within a morpheme, that is, with *c* < *k* in forms like *cena, celyj,* etc. However, new dialectal information indicates that the second palatalization was not universal even within a morpheme. In northwestern dialects of R (Pskov, Novgorod, Gdov) there exist many derivatives first noticed in three root morphemes which apparently did not

[2] Slk retains the 2nd palatalization in the nominative plural masculine but eliminates it in the locative singular except in a few scattered "dialect islands". Sln eliminates it completely in nouns but retains it in verbs (imperative forms).

undergo the second palatalization, for they still occur with *k* to this very day. Three roots is not an impressive total,[3] but they involve concepts which are (or, at least, were) in everyday use. These are the following: *k'ed-* 'strain, filter'; *k'ep-* 'flail'; *k'ev-* 'bobbin'. Compare the corresponding Ukr *cidyty* 'to strain'; *cidylo* 'strainer'; *cip* 'flail'; *civa* or *civka* 'bobbin' and P equivalents *cedzić, cedzidło*; *cep* and *cewa* — all showing the second palatalization. Regarding R forms like *v ruke,* we can always argue that *k* was "reestablished" since many other forms with *k* (nom. *ruka,* acc. *ruku,* etc.) never disappeared. However, if a root like **kajp-* were to develop as elsewhere in Slavic to **cěp-,* the original *k* is lost forever. There is no source from which *k* could be reestablished. NW R forms like *k'ep,* etc. are, therefore, difficult to explain in any other way except by assuming that they never underwent the second palatalization. Let us now summarize:

- The NW tip of E Sl as a remote isolated region was initially left untouched by the second palatalization.
- This process later spread from the south when all E Sl territory was united politically under the Kievan Rus' Empire and culturally by the introduction of Christianity and with it OCS.
- The second palatalization was never accepted in positions of alternation (that is, at morpheme boundaries) and only in other situations as the population gradually accepted the new pronunciation one item at a time, but some areas never accepted the new pronunciation in the three roots mentioned above.

By the time *c* came into existence, most areas of E Sl had developed or were developing another voiceless affricative, namely, *č* < *kj, k* (by first palatalization), *tj, ktĭ, gtĭ.* However, the Pskov—Novgorod region may have lagged behind in this process as in others. Instead of *č*, this region may have preserved an older intermediate stage such as *t'* (p. 114) or the resulting affricate may have been articulatorily closer to *c* (as in W Sl) than to *č*. In any event, speakers in this region when adapting *c* (then palatalized) from the south never made a distinction between this affricate and the one from *tj*, etc. The same applies to *c* < *k* by the so-called third palatalization. Right from the earliest documentation, northern scribes hopelessly confused the letters *ч* and *ц,* and the vast majority of N R dialects to this day have only one voiceless affricate. This feature is referred to as *cokan'e,* but does not mean that the single existing voiceless affricate is always *c* — that is a minority situation of more recent origin. In the majority of N R dialects, especially the conservative isolated ones in the far northeast (descendents of Novgorod), the single voiceless affricate is highly palatalized, articulatorily between *č* and *c*.

[3] Further investigation of the Novgorod birch-barks continues to reveal an ever increasing number of examples of nonpalatalized forms.

To recapitulate, we have:

k > *c*: everywhere in Slavic
g > *(dz >) z'*: everywhere in Slavic. *dz* is retained only in P and Ohrid dialects of W M and likely in early OCS documents
x > *š*: W Slavic
> *s'*: elsewhere
kv > *kv*: W Sl
> *cv*: elsewhere
gv > *gv*: in W Sl only
> *(dzv)* > *zv*: elsewhere
sk > *šč*: W Sl with various later simplifications
> *sc*: elsewhere but with various simplifications possible

At the time of the second palatalization, speakers of PSl were coming into contact with other linguistic groups, and a certain number of new loanwords including place-names were entering Slavic speech. If any of these borrowings contained a velar + front vowel (that is, any front vowel), then these forms underwent the second palatalization. For example, the Slavs borrowed the word "church" in the form **cьrky* (R *cerkov'*) from German **kirkō*, and "vinegar" in the form **ocьtъ* (Ukr, P *ocet*) from Lat *acetum* with *k* > *c*, not *k* > *č* as would have occurred at an earlier date.

The rise of nasal vowels. Up until this time syllables of the type *CV̌nCV* or *CV̌mC* were perfectly possible in PSl. Now the general tendency to tolerate only open syllables affected this type of syllable also. The solution here is a type of monophthongization in that the vowel and the nasal sonorant (either *n* or *m*) merge together to form a single unit, namely, a nasal vowel. Either of the two front vowels (in the two-level system) + *n* or *m* give rise to a single front nasal (written *ę*) and the two back vowels (traditionally *ъ*, *o*) + *n* or *m* give rise to a single back nasal (written *ǫ*).

The use of the symbols *ę* and *ǫ* do not necessarily mean that we are dealing with nasal mid-vowels; it is merely a way of indicating that PSl had two nasal vowels — one front and one back. Likely the vast majority of PSl speakers never pronounced the back nasal as *ǫ* (nasal *o*) but as nasal *u* (the ancestors of all the East Slavs, Czechs, Slovaks, Upper and Lower Lusatians, Serbs and Croatians) or as a low (or mid) back unrounded nasal vowel, that is, some sort of nasal *ɑ* or *ə* (the ancestors of the Bulgarians, Macedonians and Poles). Only as regards Sln, do we have any evidence for the existence of a mid-back rounded nasal, that is, for *ǫ*. Somewhat similar considerations apply to *ę* with this difference that in many areas of Slavic (particularly in S Sl) the front nasal seems in fact to have been a mid-front vowel. For others (the East Slavs, Czechs, Slovaks), it was a low front vowel, that is, of the type *ɑ̈* or *æ*.

Certain irregularities occur in the development of nasals in final syllables. This in turn means that we are dealing almost exclusively with declensional or conjugational endings, and in such circumstances it is impossible to know whether we are faced with a complicated sound law or with an example of morphological restructuring. Thus, all the evidence from other Indo-European languages shows unambiguously that the accusative singular ending in PIE was *-m*. In PSl, therefore, we may safely reconstruct accusative singular forms for *ŏ-, ŭ-, ĭ-* and *ā*-stems as follows: **vl̥kʷŭm > *vъlkъ; *sūnŭm > *sūnŭ > *synъ; *pontĭm > *pǫtь; *ronkam > *rǭkǭ*. We see in the roots of the last two examples the normally expected development of a nasal vowel, and in the first three examples we see the normally expected loss of a final consonant. In these instances, therefore, where a nasal consonant no longer existed no nasal vowel can develop. Why then did the same thing not take place with the last example (and with all *ā*-and *jā*-stems). The same problem exists with the first person singular endings, which in PIE were *-ō, -m* or *-mĭ*. In the present tense a nasal vowel is always attested; in other tenses it is absent, thus, in OCS we find **nesǫ* (present), **nĕsъ* (aorist) and **nesěaxъ* (imperfect).

Particular difficulties arise in those instances where we have evidence for reconstructing an ending of the type vowel + *ns* or vowel + *nts*. If the vowel were a back vowel, the sequence develops to *ū* (and later to *ȳ* as every PIE *ū* in Slavic); with a front vowel + *ns* or *nts, i* is the final result. In neither case is a nasal vowel attested although it may well be that the original but unattested reflexes were respectively nasal *u* and *i* which for unknown reasons lost their nasality at a very early date. Only when the vowel was preceded by a palatal, do we find the expected *ę* but not in all dialects of Slavic. Several very plausible theories have been put forward to explain these "irregular" developments, and the problem is by no means insurmountable. However, these explanations largely involve morphology and are beyond the scope of this work. The accusative plural is one such instance where *-ns* would be expected, but in OCS a nasal is found only if a palatal precedes. Thus, we find *kon'ę, dušę, kraję, mǫžę* etc. as opposed to *vъlky, ženy, syny, pǫti*. Why should **vъlkons > vъlky* but **konjons > kon'ę?* The fact the *-ę* is attested in, at least, a limited number of forms confirms the presence of an ending like *-ns,* but even here there are dialectal differences within PSl. All of the northern dialects (W Sl and E Sl) have here *ě — kon'ě, dušě,* etc. The *ě* here is an example of the so-called *ě*$_3$. (See p. 159.)

Another place where *-ns* or *-nts* is posited is the present participle active. In *e* ~ *o*-stem verbs OCS has *y* as in *bery* < **beronts* vs *znaję* < **znajonts*. If, however, any further ending is added, then the expected nasal appears: *berǫšti* < **berontji* as well as *znajǫsti* < **znajontji*. Again the north shows one small deviation; there we find *bera* (instead of *bery*) but elsewhere the nasal (or its later reflexes) is attested.[4]

[4] *-ont + s* would be the masc. nom. sing. form in which we expect *-onts > -ons. ont + ji* would be the fem. nom. sing. form.

Note also that in OCS the same participles which have *y* in final position have the expected nasal vowel in nonfinal position, thus, **nĕsŏnts* > *nesy* (masc. sing.) but **nĕsŏntji* (fem. sing.) > *nesǫšti* where we find the expected *ǫ* < back vowel + nasal consonant + consonant.

The nasal vowels were a relatively short-lived phenomenon in most Slavic regions. The only dialects to have retained them consistently are the Lekhitic group, that is, those in the northwestern corner of Late PSl. The extinct members of this group, Polabian, the Pomeranian dialects and Slovincian all retained them up until the time of their disappearance and P retains them to this day as does Kashubian (with some limitation). However, the nasal vowels as they exist in modern P are the result of a long series of complicated changes but because of the general interest in this phenomenon in Slavic linguistics, we will give a brief outline of the P developments. In the following summary, the absence of any length marks over *ę* or *ǫ* indicates that both long and short *ę* or *ǫ* are involved.

ca IX-X century	(1) *ę* > *'ę*. The front nasal palatalizes any preceding consonant as do all other front vowels.
ca X century	(2) *'ę* > *'ǫ* when followed by a hard dental.
end of XIII century	(3) *ę̆*, *ǫ̆* > *ą̆* *ę̄*, *ǭ* > *ą̄*
early XVI century	(4) *ą̆* > *ę* *ą̄* > *ǫ* (but spelled *ą*)

During changes No. 3 and 4 consonants which had been palatalized by *ę* in Proto-Polish did not lose this palatalization. Therefore, in the modern language we can distinguish PSl *ę* from PSl *ǫ* only on the basis of the presence or absence of palatalization of the consonant preceding the modern P nasals. For example, in the following phrases (1) *pięć dębów* 'five oaks' and (2) *piąty dąb* 'the fifth oak', the presence of *ę* in (1) as opposed to *ą* in (2) means only that when P had distinctive vowel length the nasals were short in (1) but long in (2). The 'soft' *p* in both *pięć* and *piąty* indicates that the nasal was originally a front vowel (therefore, PSl *ę*) whereas the 'hard' *d* in *dębów* and *dąb* indicates an original back vowel (that is, PSl *ǫ*). Similarly in *rząd* vs *rąbać*, we know that we are dealing with PSl *ę* in the first example, for *ž* (spelled *rz*) can evolve only from a palatalized *r*, but *ǫ* in the second example — only both *ę* and *ǫ* were long in these examples.

When we speak of the retention of nasal vowels in P, we are thinking very largely in historical rather than phonetic or phonological terms. In modern P true nasal vowels are heard only when in final position or when followed by a fricative. Elsewhere the nasal vowels have broken down into a vowel + *m, n*. For example, *mąż [mǫž]* and *jadą [jadǫ]* vs *dąb [domp]* and *kąt [kont]; kęs [kęs]* and *węże [węže]* vs *zęby [zemby], nędza [nendza]* and *będzie [ben'dz'e]*. Further, the denasalization of final *ę* (as in *piszę książkę; niosę wodę*, etc.) is

universal in colloquial usage and is regarded as an acceptable pronunciation in all but formal or solemn style.

Outside the Lekhitic area nasal vowels or traces thereof exist only in isolated patches. One such island is found in the Sln speaking area of southern Austria and is known as the Podjunsko (in Sln) or Jauntal (in Grm) dialect. It is located north of the city of Bleiburg but straight east of Klagenfurt. Here *ę* > *ą* and *ǫ* > *ǫ̨* or *ǫ* but nasality is retained only where the vowel is long and stressed. This means that all short nasals (stressed and unstressed) lost their nasality. However, the division of *ę* and *ǫ* into long and short reflexes in this dialect is not due solely to Late PSl processes but to a long series of later changes (shortenings, lengthenings, stress shifts) shared by most other dialects of Sln. Considerable time had to elapse for the existing system of long and short vowels to arise.[5] The partial lost of nasal vowels in this dialect is, therefore, a later and purely local development and not connected with a general loss of nasal vowels in much of Late PSl (X-XI centuries) including very likely the southeastern dialects of Proto-Slovene.

Another interesting area with nasal remnant are the peripheral dialects of M, particularly the southern group located largely in Greece. On the eastern and western fringes of this region there are villages preserving not true nasal vowels as in Slovene Podjunsko but vowel + *n, m.* For example, *dəmp* or *damp* < **dǫbъ; čando* < **čędo* but this nasal remnant is not always attested in all instances where PSl had nasal vowels. Some settlements show a consistent (or very nearly so) retention; other, only isolated remnants. There seem to be several competing systems of retention even within this small area where nasal remnants are attested.

The trend to eliminate nasal vowels seems to have originated in the eastern regions of PSl. In the earliest documents from the E Sl area (beginning in the mid XI century) we see that the scribes were usually unable to handle the traditional OCS spelling of the nasals. They constantly confused ѫ , ѭ *[ǫ, jǫ]* with *oy,* ѹ *[u, ju]* and ѧ , ѩ *[ę, ję]* with ꙗ , ꙗ *[a, ja]* whereas they still were able to write ъ, ь with a high degree of historical accuracy. This would indicate that nasal vowels in E Sl (or, at least, in the area from which we have documentation — Kiev and Novgorod) had been eliminated before the mid eleventh century, but how long before is difficult to say.

On the other hand, the extreme south of Slavic was more tenacious in remaining nasal vowels. The documents indicate that there is no overall loss of nasals until early in the twelfth century. However, it is only toward the end of the thirteenth century or beginning of the fourteenth that nasal vowels had disappeared in the majority of Blg dialects — a full two centuries after their loss in E Sl.

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[5] These processes are described on pp. 312-13. Crucial here is process described in No. 8, for the nasals newly lengthened by this process retain their nasality. Therefore, loss of nasality by short vowels must have occurred later than mentioned in No. 8, p. 314. This would not have been earlier than the XIII century and maybe as late as the XVI in those northern dialects where it occurred.

In the Cz and Slk areas nasal vowels were probably lost by the early eleventh and in Sln (southeastern dialects) and SC at approximately the same time. The scarcity of documentation from the Lusatian area makes it difficult to reach solid conclusions. However, it would seem that nasal vowels still existed in the eleventh century and may have remained until the early thirteenth.

In the languages having lost nasal vowels, their former presence is indicated in those situations where *n* or *m* alternate with an oral (i.e. nonnasal) vowel. For example, in Cz the root meaning 'reap, harvest' occurs in two basic forms: *ž* + vowel or *žn* as in *žíti* 'to reap', *žal* 'reaped', *žatva* 'harvest', but *žnu* 'I reap', *užinati* 'to reap' (imperfect), *žnec* 'reaper', and *dožinky* 'harvest festival'. How do we explain the presence of *n* in some forms but its absence elsewhere?

The riddle is quickly solved when we turn either to P or OCS. Wherever Cz has *ž* + oral vowel, the latter two have *ž* + nasal vowel, that is, Cz *žíti* vs P *żąć*, Cz *žal* vs P *żął*, Cz *žatva* vs OCS *žętva*. As we know, comparative evidence has shown that nasal vowels can arise only where a vowel + *m*, *n* + consonant had existed. It is, therefore, safe to say that all forms of the root for 'reap' contained *n* in early PSl, existing in (based on OCS evidence) two ablaut grades: **žīn-* and **žĭn*, later **žin* and **žьn*. Thus, in late PSl **žīn* + *tī, lŭ* or *tvā* > **žęti, žęlъ, *žętva,* but *n* remains intact in **žīn* + *īkŭ* > **žьnьcь* or *ū* + *žīn* + *ātī* > **užinati*. This original regularity is, of course, erased in any language losing nasal vowels as in the Cz examples.

The third or progressive palatalization of velars. Although the use of the term "third palatalization" is more or less traditional in Slavic linguistics, not all scholars are in agreement that this palatalization was in actual fact the third in chronological order. Therefore, it is often known by other names. Some prefer to call it "Baudouin's" or "de Courtenay's" palatalization or simply the BdC palatalization after Baudouin de Courtenay, the first scholar to attempt a description (1894) of this phenomenon. The most common alternative, however, is the "progressive palatalization" because all are agreed that it was brought about by the vowel preceding the velar whereas the other two were caused by the vowel following the velar. Let us compare the differing conditions for all three palatalizations.

1st palatalization: *k, g, x* + any front vowel > *č, ž, š*.
2nd palatalization: *k, g, x* + *ě₂* or *i₂* < *aį* > *c, dz* or *z', š* or *s'*.
3rd palatalization: *ĭ, ę* + *k, g, x* + vowel (except *ŭ*) > *c, dz* or *z', š* or *s'*.

In traditional formulation, the third or progressive palatalization occurs in the environment *i, ь, ę* + velar + vowel except *ъ, y*.[6] That is, for the first and second palatalizations, the front vowels influenced the velar in a regressive direction

[6] This statement, of course, confuses chronological levels. As far as can be established this palatalization occurred before *ĭ* > *ь*, *ŭ* > *ъ* or *ū* > *y*.

(*k* ← vowel) as opposed to the progressive influence (vowel → *k*) of the front vowel in the so-called third. Note that for this palatalization, only three vowels (*ī, ĭ* or *ь, ę*) played a role, not all the front vowels existing at that time. Note also that the second and third palatalizations give identical reflexes although the conditions are quite different. Both palatalizations cause *k* > *c* everywhere and both cause *g* > *dz* or *z'*, also *x* > *š* or *s'* in exactly the same geographical distribution.

In the modern languages the effects of this palatalization are seen largely in the reflexes of the nominal formants *ĭk* and *īk (ьk, ik)* > *ьc, ic*. Comparative evidence indicates that in the earliest stages of PSl the nominative singular ending in nouns of this type would have been *-ā* for feminines, *-ŏ* (or *ŏd*) for neuters and *-ŏs* for masculines, and none of these vowels or their reflexes in later PSl would have blocked the third palatalization. For masculine nouns, however, the older *-ŏs* was eventually replaced by *-ŭs* borrowed apparently from another declensional type, for we can establish no phonetic rule explaining *-ŏs* > *-ŭs*, and there is the further problem of whether final *s* should be included or not. We are uncertain, therefore, what the masculine nominative singular ending would have been at the time of the third palatalization, and this uncertainty is reflected in the confusing variety of reconstructions cited in the textbooks. In OCS, on the other hand, the situation is clear; all such forms are spelled *otьcь, čьtьcь, kupьcь, telьcь, starьcь*, etc., with *-ь* < *ĭ* as the nom. sing. ending, but this has to be a later development, for any syllable like *kĭ* > *čĭ* > *čь* by the first palatalization. The fact is that a whole series of morphological changes was necessary after *ĭk* > *ĭc*, for *c* was soft and could not be followed by a back vowel. This means that all forms with the new *c* were declined as if they belonged to the so-called soft groups (historically the *jŏ* and *jā* stems), but in many instances it is difficult to reconstruct what precisely a given ending may have been before the restructuring occurred. With the third palatalization, therefore, the usual method of citing examples with formulae adds little to our understanding of the process. It is perhaps more instructive to deal with whole classes of examples.

From the OCS examples cited above, we recognize a very productive class of nouns familiar to us from any of the modern Slavic languages, for example, R *otec, kupec, starec, černec, lovec, palec*; P *ojciec, kupiec, starzec, łowiec, chłopiec*; Ukr *otec', černec', palec', lovec'* (with soft *c* retained); SC *òtac, kúpac, stàrac, crnac, lòvac* and many, many others. All derive from *ĭk* > *ьc* and all still show the same declensional pattern in that *ь* disappears in weak position. R *kupec - kupca*, Ukr *kupec' - kupc'a* or SC *kúpac - kúpca* < PSl **kupьcь -*kupьca.*[7]

In feminine and neuter nouns *ĭk* also occurs but less commonly. In neuters we find it in the form *-ce* (often a diminutive) as in R *derevco, bl'udce, kolence,*

[7] Remember that PSl *c* was always palatalized, therefore, it is not necessary to mark it as such although it would be more accurate to write *kupьc'ь - kupьc'a* or *ĭko* > *ьc'o* > *ьc'e* and so on.

serdce, solnce; Ukr *derevce, slivce, pyvce, jajce*; SC *slȍvce, dȓvce, jájce, sûnce;* Blg *selce, zrənce, slənce.* These are derived from *ĭko* > *ьco* > *ьce* (*o* > *e*, see p. 116, because *c* was soft). R *jajco, slovco, sel'co* with stressed *o* are all of later origin. In feminines there exist few examples: OCS *ovьca,* Cz *ovca,* Ukr *vivc'a* (with soft *c* retained); SC, Sln *óvca*; P *owca*; R, Slk, Blg, M *ovca* < **ovьca* < **ăvĭkā*; OCS *dvьrьca, myšьca* and also some masculines with the same ending but used to indicate "nomina agentis" such as *sěčьca* < **sěčьka* < **sēkĭkā* 'one who chops, butcher, executioner' from the root **sěk* 'cut, hack'. This suffix is still very productive in W Sl: P *obrońca,* Cz *obrance* (*ce* < *ca* is later), Slk *obranca* 'defender'.

The change *īk* > *ic* is attested in a few neuters and is extremely productive in feminines. This includes Ukr *lyce*; Cz, Slk, SC, Sln *líce*; P, M, Blg *lice*, all exhibiting *iko* (*īkă*) > *ico* > *ice* (with *o* > *e* as in *-ьce*). The *-o* in R, UL, LL *lico* is of later origin. Note that *c* is now hard in all examples, but Ukr still has *c'* + *a* as in *lyc'a* (nom. plural). To the feminines belong a vast array of examples ending in *ica* < *ika*, attested everywhere in Slavic: R, Blg, M, LL *granica*; Slk, UL *hranica*; Cz *hranice* (*e* < *a* is later); SC *grànica*; Sln *grânica*; Ukr *hranyc'a* (with *c'* retained).

To the third palatalization also belongs a certain number of Germanic borrowings ending in *-ing* which gives PSl *ęg* > *ędz'* (P, OCS?), *ęz'* (elsewhere). An oft cited example is Germanic **kuningas* 'king' > **kъnęg-*> OCS *kъnędzь*; R, Ukr, Br *kn'az'*; Cz, LL *kněz*; Slk *kňaz*; UL *knjez*; Blg *knez*; SC, Sln *knêz*; P *ksiądz* (*n'* > *s'* is later). When the Slavic suffix *-ūn* (later *-yn*) was added to this same root, *ū* blocked the palatalization, and the velar was retained, thus, **kъnęg* + *ūn* > **kъnęgyn* + ending: Ukr *kn'ahyn'a*; R *kn'agin'a* (*gi* < *gy* is later); SC *knegínja*; Slk *kňahyňa*; UL *knjeni* (< *knehini*?)

Some miscellaneous examples are:

(a) with *ink* > *ęk* > *ęc*
(b) with *ing* > *ęg* > *ędz* or *ęz'*
(c) with *ĭg* > *ьdz* or *ьz'* as follows:

— OCS *měsęcь, zajęcь*; R, Br *mes'ac, zaje/a/c*; Ukr *mis'ac', zajec'*; Cz *měsíc, zajíc*; Blg, M *mesec* but Blg *zaek*, M *zajak*; P *miesiąc, zając*; SC *mȅsēc, zȅc*
— P *jędza*; Cz *jezinka*; Ukr *jaz'a* and *jaha*; SC *jéza*
— OCS *polьdza* > later *polьza* borrowed into R as *pol'za*[8] vs Ukr *pil'ha* and P *ulga* (with no *g* > *dz, z'*); R *nel'z'a*[8] vs Br *nel'ɣa*; Cz *nelze*; OCS *stьdza*; R *stez'a* and *stega* (dial.); Old P *śćdza*; Old Cz *stzě*; SC *stàza.*

Finally, there are examples of the third palatalization in verbs, especially in S Sl, where it is fairly well known but absent in E Sl and only rarely in W Sl.

[8] Note the difference: hard *z* in Church Slavonic borrowings but *z'* in native words.

Thus, from the roots **dvig, *klik, *tęg* we have OCS *dvidzati, klicati, tędzati*; SC *dvìzati*, but also *pòdvigati, klîcati, tézati*; Sln *podvígati*, also *dvígati, klícati, iztezati*, also *iztégati*. Modern Blg and M provide little but the older stages of the language starting with OCS show many examples. Opposed to the S Sl examples are R *dvigat', klikat', t'agat's'a*, and the other E Sl languages all preserve the velar. Modern R forms like *vosklicat', otricat', ist'azat'* from the root **klik, *rik, *tęg* are all Church Slavonic borrowings.

WEST SLAVIC: Old P: *ciądzać* < **tęgati* but also *ciągać*, now the only form attested; UL *ćazać* and *ćahać* < **tęgati* vs LL *śěgaś*; UL *klacać* and *klakać*, also LL *klěcaś* and *klěkaś* < **klękati*; Kashubian dialect *kləcac* < **klikati* vs P *klikać*; Old Cz has several instances, but all the W Sl examples are sporadic.

In S Sl this alternation became very productive as a means of forming iterative verbs. As such it was extended to forms in which there are absolutely no grounds for the third palatalization, for example, OCS *navycati* < **navykati*; SC *ticati* < **tykati, disati* < **dyxati*.

In all the examples cited above, there have been until now none with *x*. This is because there is really only one generally accepted example of *x* > *š* or *s'* and this is in the pronoun "all" **vьx-* > W Sl **vьš-*; E Sl, S Sl **vьs-*. Examples are in the nominative singular neuter: OCS *vьs'e*; Ukr *vse*; R, Br *ws'o*; SC *svè* < *vse*; Sln *vsè* vs P *wszystko*; Slk *všetko*; UL, LL *wšo*. In the Pskov and Novgorod regions there are many examples of unpalatalized forms, that is, *vex, vxa, vxe*, etc., even in formal documents as late as the thirteenth century and in birch-barks down to the fifteenth. They were only gradually replaced by the *s*-forms.

The third palatalization is very irregular in its operation. Very often it does not take place in those environments where it would be expected, and this is not only in isolated exceptions but in whole classes having the identical phonetic structure as those which underwent the palatalization. There are counterexamples for almost all the groups cited above. For example, it is very puzzling why there exist so few instances of *x* > *š, s'*; exceptions to the rule far outweigh the examples. Why should *ьk* > *ьc* in Late PSl **otьcь* but not in **rǫčьka, *vьnučьkъ*? Why *ik* > *ic* in **grěšьnica* but not in **grěšnikъ* or **starikъ*? Why should *g* in **kъniga, *prisęga*, etc. remain unchanged everywhere? How can one explain **prisęga* > SC *prȉsega* vs *prisézati* (verb from the same root) < **prisęgati*? *īkā* > *ica* is attested very consistently throughout Slavic but R has *-ika* in the names of berries or wild fruit: R *černika, brusnika, zeml'anika* vs Ukr *černyc'a* or P *czernica*, etc. On the other hand, one very common tree name has *-ika* everywhere in Slavic except UL and LL: P, Cz, Slk, Blg *osika*; Ukr *osyka*; SC *jàsika*; Sln *jesíka* vs UL *wosyca*. Even OCS has two notable exceptions: *bližika, ǫžika*.

In order to understand the complexity of these problems, we must consider some specific examples. If the conditions formulated above are correct and not all scholars agree that they are, the third palatalization should have affected the declension of nouns of the type **ătĭk-* (or **otьk-*) in the following way: this

palatalization would have been blocked only when *ŭ* (or *ъ*) and *ū* (or *y*) followed *k*. Even if we grant that *ŭ* < *ŭs* was the nominative singular and, as mentioned, there is some question about this, out of fifteen possible case-endings only five would have had the structure *ĭk* + *ŭ* > *ьkъ* (nom. and acc. sing., gen. plural) or *ĭk* + *ū* > *ьky* (acc. and instr. plural). All the others would have had either the necessary conditions for the third palatalization or had already undergone the second palatalization. In these latter we expect *k* > *c* as opposed to *k* being retained in the other five. Now, let us apply the same reasoning to OCS nouns of the type **pǫtьnikъ, *věstьnikъ*, etc. Such nouns were also masculines belonging to the very same declensional type as **otьk-*. Therefore, the number and distribution of forms with *k* > *c* or with *k* retained should have been identical. However, the evidence from OCS and the modern languages shows unequivocally that the two types developed quite differently. In the *otьcь*-type, all the alleged forms with *k* have disappeared without trace, but not in the *věstьnikъ*-type. It is tempting to see some sort of analogical leveling at work, especially in the *otьcь*-type whereby all forms with *k* were eliminated under the influence of the *c*-forms which were in the majority, but the same situation presumably existed in both types. Why would *c* be generalized in one but *k* in the other? It seems clear that *k* was not reinstated or generalized here; rather it was never lost. The third palatalization never occurred in the *věstьnikъ*-type of nouns.[9] The evidence permits no other conclusion but there is no agreement as to why this should be. One cannot argue that only *ĭk (ьk)* is subject to this palatalization but not *īk*, for *īk* > *īc* is widely attested in feminines like **granica* or **grěšьnica* as opposed to **grěšьnikъ*. The traditional formulation of the third palatalization as stated above can tell us only where it is likely to occur but provides no explanation for all the exceptions or counterexamples.

One frequently offered explanation for these exceptions is that the third palatalization is not a general PSl process in the same sense as the first two palatalizations were. The data indicate that the third palatalization is attested with the greatest degree of regularity in the southwest corner of Slavic. Here is the geographical centre of this phenomenon, and it is, therefore, well attested in the OCS documents. However, as one moves further to the north and east, instances of the third palatalization become more and more sporadic. This is partially true, but even the OCS documents provide many counterexamples.

The other explanation is that this palatalization is not the third chronologically but occurred very early in the history of PSl, perhaps even before the first palatalization.[10] This means that it operated under a vastly different set of condi-

[9] These nouns still exhibit the second palatalization in the loc. sing. and nom. plural as *věstьnici* but this has nothing to do with the 3rd palatalization. OCS *prorokъ* and *vragъ* have nom. plural *proroci, vradzi* obviously not caused by the vowel before *k, g*.

[10] The most articulate and convincing exponent of this view is H. G. Lunt, *The Progressive Palatalization of Common Slavic*. Skopje, 1981, which became available to me too late for the

tions which were obscured by later developments. For example, if we take the adjective **velikъ, *velika, *veliko,* it appears to be just another one of those mysterious exceptions to the rule. However, the same adjective also occurs in another form, namely, **velьjь* where we see a diphthong before the *ъ*-ending. Since *ьj* is the normally expected form of the diphthong *eį* before a vowel, it is clear that *i* in **velikъ*, etc. is not an etymological *i* but $i_2 < eį$. Thus, we have at least one clear example of the absence of the progressive palatalization where i_2 is involved. If this is strengthened with further examples, then we could establish a general principle that i_2 does not bring about the progressive palatalization, but etymological *i* does. This means that the palatalization took place before i_2 arose, when the diphthongs still existed, and that it had ceased to operate by the time of $eį > i_2$, for once i_2 comes into existence it merges completely with etymological *i* and thereafter acts exactly like it.

Since the source of *i* has become a factor, then perhaps there is a clue to such mysteries as OCS *telica* vs *pǫtьnikъ* where presumably both *ic* and *ik* derive from **ik* with no possibility of explaining the presence of the palatalization in one instance but its absence in the other. Using the other approach, it is possible that in *telica, ic* derives from *ik* as opposed to *ik* from *eįk* in *pǫtьnikъ.* However, *eį* is not the only possible source for a secondary *i.* For example, in OCS *bližika* 'fellowman' it is quite possible that *i* could have derived from $ū_1$ since *ž* was soft and $u > i$ is expected in this environment. The proto-form, therefore, here could well be *bližuka* in which no progressive palatalization is possible. This explanation becomes all the more convincing when we see that there are also valid historical and linguistic reasons for positing the addition of both *j* and *uka* to the root *bliz* 'near' from which *bližika* is derived, that is, **blīz + jūkā > *bližuka > *bližika.*

Feminine diminutives like R *ručka, nožka, muška* are also a problem for the traditional approach, for they must have contained *ьka* < *ĭkā* but without the expected *ĭkā > ьca.* Diminutives of this type, however, are unknown or extremely rare in S Sl indicating that they are not of PSl origin but arose after the emergence of dialectal divisions. If this is so, then they are later than the progressive palatalization and not part of the problem at all. On the other hand, the evidence provides some instances where *ьka* cannot be derived directly from *ĭkā* but from *jŭkā* as in **pŭtjŭkā > *pьt'ĭka >* Cz *pecka,* R, Ukr, *počka* because only *jotation* of *t* can explain Cz *c* vs E Sl *č.* Thus, placing the progressive palatalization in the distant past provides two possible explanations for no *k > c* in *ьka* whereas the traditional approach provides none.

Such examples can, of course, be multiplied, but all of the above give some idea of what may be achieved by viewing this palatalization as one belonging to very early PSl.

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general conclusions to be incorporated into this work. I was able only to add this excerpt; all examples cited are taken from Lunt. It is highly likely that as this work becomes better known, its conclusions will be a commonplace in Slavic studies.

Simplification or retention of *dl, tl.* Up until this time *dl* and *tl* had been perfectly acceptable clusters for all Slavic speakers. Now these clusters simplify in the usual Slavic way by eliminating the first member of the cluster. This simplification, however, did not take place everywhere.

dl, tl > *l:* in South and East Slavic
dl, tl > *dl, tl:* in West Slavic

This is most clearly seen in the *l*-participle forms of verbs the root of which ends in *d* or *t*, such as **ved* 'lead' or **plet* 'plait, braid'. For the sake of simplicity we will cite only the feminine singular form of this participle:

**vedla* > OCS, SC, R, Ukr, Blg *vela*
**vedla* > Cz, Slk *vedla,* P *wiodła,* UL *wjedła*

Within a root one of the most frequently cited examples is the verb for 'pray, plead'.

**modliti sę* > OCS *moliti*, R *molit'sja*, Ukr *molytys'a*, Br *malicca*, SC, Sln *moliti*, Blg *mol'ə*, M *moli,* P *modlić się*, Cz *modliti se,* Slk *modlit' sa*, UL *modlić so*, LL *modliś*

The development of *tl-, dl-* as shown above is accurate in the vast majority of instances, but there are some interesting local deviations which deserve mention. Much of northern Sln (Carinthian dialect) retains the *tl-, dl*-clusters to this day, and this feature may have extended considerably further south in centuries past. This is not quite so puzzling when we consider that at the time of *tl, dl* > *l* there was as yet no German or Hungarian speaking wedge dividing the ancestors of the West Slavs from those of the South Slavs. This area of N Sln can, therefore, be understood as the southwestern limits of an entire region (W Sl) which retained *tl, dl* intact.

Somewhat further to the east in Central Slovakia the *tl-, dl*-clusters developed in a way not expected in a basically W Sl area. Here *tl, dl* > *l* as in S Sl, but we are hardly justified in saying that this is merely a S Sl spillover into an area somewhat further north than expected, for *tl, dl* did not simplify in every environment. This occurred only within a root; at morpheme boundaries *tl* and dl are retained. The mixing of S Sl and W Sl features occurred not only in the reflexes of *tl-* and *dl-* but in many others. This mixing is so regular that Proto-Central Slk should best be thought of as a transitional dialect, not merely as a W Sl dialect with a haphazard sprinkling of S Sl debris.

In the Pskov region *tl, dl* did not simplify as elsewhere in E Sl but underwent a special development, namely, *tl* > *kl* and *dl* > *gl*. Here we are dealing with a slightly different situation than was the case with N Sln. This dialect bordered with an area retaining *tl, dl* but Pskov, to the best of our knowledge, had no such contacts. However, the retention of the original *tl-, dl*-clusters in the Pskov dialect seems to be a very early example of dialectal division in E Sl — one having arisen

without any external motivation. Possibly the relative isolation of this northwestern fringe of E Sl may explain this archaism. Its archaic nature is seen in the fact that only the original *tl, dl* > *kl, gl* but not the new *tl, dl* resulting from the loss of *ъ, ь*. That is, **povedli* > *povegli* (literary R *veli*) but **sedьlo* > *sedlo*. Under the influence of the neighboring dialects and literary R, the Pskov dialects have largely eliminated this feature but some remnants survive.

The development of Proto-Slavic *ū*. In Slavic the long high back rounded vowel, inherited from PIE (that is, $\bar{u}_1$), develops in two phases.

1. $\bar{u}_1$ loses its rounding for which Slavic linguistics uses the symbol *y*, that is, $\bar{u}_1 > y$. There is still some question about the precise phonetic value of *y* at the earliest stage. Obviously the *y* of modern R (orthographically *ы*) represents a fairly ancient phase, for it differs very little from the original $\bar{u}_1$. Only the rounding is lost and the articulation is shifted somewhat forward. However, there may have been intermediate stages — possibly a diphthong of the type *uį*.

2. After losing its rounding, *y* tends to shift its point of articulation forward. Only in R and Br is *y* retained as a non-front vowel. In most areas of Slavic *y* simply becomes a high front vowel and merges with *ī*. This includes all of S Sl, Cz and Slk. This merger took place at a very early date in Sln and SC but somewhat later in Cz and Slk where an orthographic distinction is still maintained. In Ukr, P, UL and LL it becomes a front vowel articularly close to Eng *i* in *it*.

The final development of *dj, tj* (with *ktĭ, gtĭ*). During the discussion of *jotation* in Slavic, we touched upon the problem of the reflexes of *dj* and *tj*. Whatever the intermediate stages may have been, it was only later during the period of dialectal disintegration that the final step was taken producing the reflexes as they now exist. From the standpoint of articulatory phonetics, it is logical to expect that the *jotation* of *d* or *t* would produce an affricate since this represents the phonetic blending of a stop and a fricative. This is especially true as regards the reflexes of *tj* (plus *ktĭ, gtĭ*). Only in OCS and Blg (plus older M) do we find a reflex (*št'*) which is not an affricate. In the case of *dj*, however, affricates are attested only in SC, Slk and P and partially in Ukr and Br. Elsewhere *dj* develops into a fricative. To what extent these fricatives are secondary and the nature of any affricative from which they may have developed — are still unsolved problems in Slavic linguistics.

A similar problem exists with the reflexes of the *jotated* or palatalized velars. We have *k* > *č* by *jotation* and the first palatalization and *k* > *c* by the second and third palatalizations. One would, therefore, expect the voiced velar *g* to develop in a parallel manner, that is, *g* > *dž* and *dz*. In spite of the fact that such expectations are phonetically well founded, *g* > *dž* (by *jotation* and first palatalization) is attested nowhere, only *g* > *ž*, and *g* > *dz* (by second and third) exists only in P and perhaps OCS but everywhere else *g* > *z*. These anomalies are

usually explained away by assuming affricatives for all of Slavic at an earlier stage with later simplification to fricatives, that is, *g* > *dž* > *ž* (everywhere) and *g* > *dz* > *z* (most areas).

The reasons for mentioning the jotation and palatalization of velars in a discussion of *tj* and *dj* are twofold.

1. At the time *tj (ktĭ, gtĭ)* and *dj* were in their final stage of development, Slavic already possessed a number of affricatives (and fricatives): *č, c* < *k*; *dž, dz* or *ž, z'* < *g*. The reflexes of *tj* and *dj* tend to merge with one of the existing affricatives and/or fricatives.

2. When *k* and *g* or *t* and *d* are preceded by *s* or *z*, the results of the first palatalization and *jotation* of the velars always merge with the results of *jotation* of the dentals.

The following tables will summarize the details discussed.

TABLE I

PSl origin	*East Sl Sln*	*West Sl*	*SC*	*Blg*	*OCS*	*M*
k (by 1st pal.) kj > č	č	č	č	č	č	č
ktĭ, gtĭ, tj > t'		c	ć	št	št'	ќ
k (by 2nd, 3rd pal.) > c	c		c	c	c	c

TABLE II

PSl origin	*R*	*Ukr Br*	*Cz UL LL*	*P*	*Slk*	*Sln*	*Blg*	*OCS*	*SC*	*M*
g (by 1st pal.) gj > ž	ž	ž	ž	ž	ž	ž	ž	ž	ž	ž
dj > d'		dž/ž	z	dz	dz	j	žd	žd'	đ	ǵ
g (by 2nd, 3rd pal.) > dz or > z	z'				z			dz/z'	z	z(dz)

TABLE III

PSl origin	*R*	*Ukr Br*	*Cz Slk*	*UL LL*	*P*	*OCS*	*Sln*	*SC*	*Blg M*
sk (by 1st pal.) skj > šč stj > šč	š'š'	šč	št'	šć	šč	št'	šč	št/šć	št
zg (by 1st pal.) zgj > ždž zdj > ždž	žž or ž'ž'	ždž	žd'	ždź	ždž	žd'	žj/ž	žd/žđ	žd

Before commenting on the historical significance or interpretation of the data given in the three tables, it is necessary to add a few words of explanation about the reflexes themselves.

1. Macedonian *ќ* and *ѓ* are for some speakers stops but for most do not in any significant way differ phonetically from SC *ć* and *đ* although the distinct orthography tends to obscure this fact. However, *ќ* and *ѓ* are not characteristic for all of M but are limited to the north and central regions. The evidence indicates quite clearly that the original situation largely paralleled that of Blg and that *ќ* and *ѓ* arose later as the result of Serbian influence.

2. The *št* and *žd* (< *tj, dj*) of OCS, Blg and the peripheral *jotations* of M (that is, east, south and west central) are difficult to explain phonetically. *Jotations* of *t* and *d* are encountered rather frequently in the history of various languages, but reflexes like *št, žd* are rare if not unique. The simple facts of articulatory phonetics make it highly improbable that *št* or *žd* could be the direct results of *jotations.* It is, therefore, a perennial problem of historical Slavic linguistics trying to suggest plausible intermediate phases leading naturally to the attested reflexes, but the existence of such a phase (or phases) is not really in doubt.

This means that *št, žd* could have arisen at a time considerably later than the final developments of *t', d'* (< *tj, dj*) which are generally placed in the eighth and ninth centuries. Therefore, it is probable that *št* and *žd* did not exist in the speech of St. Cyril and Methodius. *št* < *tj* and *žd* < *dj* are traditionally cited as typical OCS features, but the documents reflecting this are separated from St. Cyril and Methodius by, at least, a century and a half or two centuries. This has interesting ramifications in determining the stock of letters and their phonetic value in the original Glagolitic script. (See the discussion on pp. 61-4.)

3. Such forms as *dzvezda* < **gvězda* and *jandza* < **jęga* in M are often cited as examples of *g* > *dz* (by second and third palatalizations). Such examples, however, are not reliable for M provides many instances of *dz* < from etymological *z* where no second or third palatalization ever took place as in *dzver* < **zvěr'ь* (R *zver'*, SC *zvêr*), *dzid* < **zidъ* (SC *zîd,* Blg *zid*) or *edzero* (dial. for

ezero). This process is not limited to *z* > *dz* but all fricatives are subject to sporadic affrication which to varying degrees is reflected in the literary language. Even after making allowance for this, *z* is still the basic reflex for the second and third palatalization of *g*. We see this clearly in masculine nouns ending in *g* where *g* > *z* in the nominative plural (*vrag, vrazi*), the plural of *noga* = *noze* (< **nogě*$_2$, formerly the dual) and even the fossilized expression, *pomozi Bog* 'God bless you' has *z* < *g*. Only the Ohrid area retains the *g* > *dz* alternation.

4. In modern literary Ukr and Br *dž* < *dj* is limited to those instances where *unjotated d* or *d'* (*d'* > *dz'* in Br) is retained in other forms of the same root. In essence this is now confined to verbs. For example, Ukr *xodžu,*[11] *vyxodženyj,* because of *xodyty, xodyš, vyxid*; Br *sudžu, sudžany* because of *sud, sudzic'* as opposed to R *xožu, sužu, vyxožennyj, suženyj* (also *sužd'onnyj* from the same root but with *žd* from OCS) but all the E Sl languages have *ž* in *meža* < **medja* because no form of this root retained *d* or *d'*. These data have lead to the suggestion the *dž* in Ukr and Br is a later phenomenon. This view posits an overall E Sl change of *dj* > *ž* and a later introduction of a stop-phase into the articulation of those forms retaining a stop in other forms of the same root; that is, **xŏdjōm* > *xožu* as a common E Sl development, then *xožu* > *xodžu* influenced by the *d* of other forms. This explanation may be valid for Br where the change *d'* > *dz'* introduced a new affricate into all verb forms containing *d* + *i* (as in **xoditi* > *xadzic'*), thus making the introduction of the affricate *dž* in other forms a more logical possibility. Besides, the distribution of *dž* in both Br and Ukr does not form a single unbroken geographic mass but is interrupted by an area (NE Ukr and S Br) without *dž*. If this area is of ancient origin, the *dž* of Br and that of Ukr may have separate histories.

The situation in Ukr is more complicated. Firstly, restructurings of consonantal alternations in verbs have operated in a different direction — all *jotated* segments tend to be eliminated. This occurs throughout the entire southeastern dialectal region and also in a separate patch in the central part of the northern dialect. Here we have the first person singular forms *xod'u, plat'u, pros'u, voz'u* instead of the literary and historically justified *xodžu* (or *xožu*?), *plačú, prošu, vožu*. Secondly, there remain dialects in the extreme south-west (Boyko, Lemko and some Transcarpathian) in which *dž* is attested in all instances where comparative linguistics would reconstruct *dj*. Thus, we have not only *xodžu, sudžu* as in the literary language but also *medža, čudžyj, pr'adža* (for literary *meža, čužyj, pr'aža*), etc. where *d* could not have been "reintroduced" because there no longer existed any related forms containing *d*. What's more, the evidence indicates that this situation formerly extended much further east. The tentative conclusion is that initially *dj* > *dž* and that *ž* is the result of a later simplification of *dž*. Thus, *ž* is the innovation and *dž* the archaism, not vice versa.

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[11] Forms with *dž* are limited to the west and central regions. The SE had *xod'u* but elsewhere *xodžu* and *xožu* are in free variation.

5. Table III shows that we posit *šč* and *ždž* (of whatever sources) as two basic PSl clusters. They are preserved to this day in an area even greater than that indicated by the table. The simplification of *šč* > *št'* and *ždž* > *žd'* is by no means universal in the Czech and Slovak area. Although a feature of the standard languages, *št'* and *žd'* occur only in the Bohemian dialects of Cz and the central dialects of Slk. Elsewhere *šč* and *ždž* are retained. In standard R *šč* or *š'č'* is still an acceptable alternative pronunciation for *š'š'* and both *šč* and *ždž* are well attested in the dialects — especially in the west and in the conservative isolated ones of northeastern European Russia.

Elsewhere these clusters simplify. The most common method of simplification is to eliminate the final fricative phase but the new final stop will initially remain palatalized, that is, *šč* > *št'*, *ždž* > *žd'*.[12] This, as mentioned, is the solution in those dialects on which standard Cz and Slk are based. It was also the solution in both UL and LL. The present reflexes of *šć* and *ždź* are perfectly regular, for *t'* and *d'* (of whatever origin) > *ć* and *dź* in UL in all environments and also in LL when a fricative precedes. Slavic borrowings in Rumanian and Hungarian and the orthography of the OCS documents indicate that *št'* and *žd'* also existed in S Sl.[13] But S Sl in general and SC, and M in particular exhibit a strong tendency to curtail palatalizations, therefore, the *št'*, *žd'* phase would naturally develop to *št*, *žd* although isolated islands of *št'* and *žd'* are reported from north and east Macedonia.[14] In spite of this and some other interesting developments, the majority of the dialects of Blg, M and the Stokavian dialect of SC have *št* and *žd* < *šč*, *ždž* and this is reflected in the literary languages as cited in Table III.

Regardless of what was stated above, literary SC has many examples of *šč* > *šć* and *ždž* > *žd'*, but these are of morphological origin, not phonetic. There are dialects of SC in which *šč* and *ždž* > *šć* and *žđ* as a regular sound law. However, this is not the situation in the Štokavian dialect on which standard SC is based. Here the regular developments are *šč* > *št* and *ždž* > *žd*, but *šć* and *žđ* may arise in the same morphological situations where *ć* alternates with *t* and *đ* with *d*. Thus, from the verbs *plátiti* and *sáditi* the past participle passive forms are *plâćen* and *sâđen* by regular *jotation* of *t* and *d* (< **plātjĕn-*, **sādjĕn-*). Therefore, with verbal roots ending in *st* or *zd* the same participal forms should contain *št* and *žd*. Thus, from *pùstiti*, we expect *pùšten* (the actual form) but from *čìstiti*, *čìšćen*, not with *št* but with *šć* where *t* > *ć* as in *plátiti* - *plâćen*. Similarly from *nagnézditi* we have *nàgnēžđen* not with *žd* but with *žđ* where *d* > *đ* by analogy to forms like *sâđen*. The forms with *šć* and *žđ* are newer, gradually replacing the regular *št* and *žd*, but the process has not been carried through to completion (as in *pùšten*).

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[12] Only R deviates by eliminating the stop-phase separating the two fricatives.

[13] In Blg and Old M this also applies to *št* and *žd* arising from *tj* and *dj*, not only from *sk*, *st* and *zg*, *zd*.

[14] In these areas *št'* and *žd'* seem to alternate freely with *šč* and *ždž*. Therefore, other areas having *šč* and *ždž* may reflect not the preservation of the original clusters but a return to that situation.

6. The Sln simplification of *žj* to *ž* is a special problem belonging to the later history of Sln itself and difficult to define. *žj* > *ž* in final position as in **dǔzdjĭ* > **dъždžь* > *dèž* but *dežjà* (gen. of *dèž*) but also in **ězdjā* > **jěždža* (> **ježja)* > *jéža* as opposed to **rozgьje* > **rožděje* > *rôžje.*

7. The reflexes of *tj* and *dj* are traditionally considered as one of the major developments in the division of PSl into dialects. Note that the S Sl area presents a different reflex for each literary language whereas all of W Sl has *c* < *tj* and all of E Sl *č* < *tj*; *dj* is only slightly more complicated (*dž* or *ž* for E Sl; *dz* or *z* for W Sl) and there are no major deviating developments even in the dialects. This situation is much more complicated in S Sl as the following table shows. In columns under *tj* and *dj* are repeated the reflexes of the literary languages.

	tj	*Dialects*				dj	*Dialects*				
Mac	ќ	št	šč	šť		ǵ	žd	ždž	žď	ž	
SC	ć	č	ќ	t'	c'	đ	dž	ž	j		
Blg	št	šč	ќ	č		žd	ždž	dž	ǵ		
Sln	č	ć	t'			j					

Having discussed the reflexes of *tj, dj* we may now look at some implications for these and the related reflexes of *k, g* (by *jotation* and 1-3 palatalizations). These are: (1) What justifies the assumption of a *t'-, d'*-stage? (2) Why did *g* so frequently produce *ž, z'* instead of *dž, dz*? (3) Could this also be connected with *g* > ɣ > *h* in certain areas?

Since the *jotation* and first palatalization of velars gave identical reflexes in all of Slavic, it is hardly surprising that *sk* and *zg* under the same conditions should also give uniform results. It is generally agreed that these were as shown in Table III: *sk* > *šč, zg* > *ždž*. All other reflexes are secondary — the result of later simplifications. The situation with *šč* is particularly clear; *kj* and *k* (by first palatalization) > *č* uniformly everywhere in Slavic, therefore, *k* in the cluster *sk* would also give *č* under the same conditions. The subsequent *s* > *š* is a clear case of assimilation to the following alveopalatal *č*.[15] The very same steps are obvious for *stj* in those areas (E Sl and Sln) where *tj* > *č*. Thus, a complete merger of *skj, sk* (by first palatalization) with *stj* is to be expected here but not elsewhere. Yet, surprisingly enough, as we see from Table III this merger is attested everywhere. If in W Sl *tj* > *c,* a palatalized dental affricate without any intermediate phase, there is no way to explain why *s* > *š* in the cluster *stj*. In modern P, for example, we have *kość* (<**kostь*) where the *s* preceding *ć* assimilates in softness but remains a dental. However, *s* in *stj* and *z* in *zdj* give *š* and *ž* everywhere in Slavic without regard to the final reflex of *tj* or *dj*. This would indicate that the initial reflexes for *tj* and for *dj* were uniformly articulated as alveopalatals (or palatals), very likely as

[15] The development of *zg* > *ždž* would, of course, follow the same steps only all members of the cluster are voiced.

stops initially and then as affricates of the type *ć* and *đ* of modern SC. Thus, the uniform development of the *s* and *z* in the clusters *stj* and *zdj* allows us to assume with reasonable certainty that *tj* and *dj* also initially gave uniform reflexes in PSl (voiceless and voiced palatal or alveopalatal stops and then affricates — marked as *t'* and *d'* in this text) and the attested state of affairs is the result of restructuring in later PSl. In this context, the *t'* < *tj* in Čakavian (NW SC) and W Sln (quite rare) is seen as an archaism.

At the time in question PSl possessed two other affricates — those arising from the *jotation* and first palatalization of *k* and *g* and traditionally reconstructed as *č* and *dž*. At a still later period these affricates were joined by yet a third set — those arising from the second and third palatalizations of *k* and *g*. Because such a variety of affricates in one language is linguistically unusual, restructurings tending to reduce this number could be expected, and as can be seen from Tables I and II this is apparently what happened. In E Sl and Sln *t'* merged with *č*; in W Sl with *c*. Only SC and M retain three distinct voiceless affricates and no area of Slavic retains the three voiced affricates posited for PSl. In Table II we see again not only mergers (*ž* with *d'* in R; *dz* with *d'* in P, etc.) but also a tendency for the affricates to lose their stop-phase, that is, to become fricatives. Even in those instances where three separate reflexes remain as, for example, in SC, only *đ* is distinct, for both *ž* and *z* merge with *ž* and *z* of other origins.

In the above discussion we have presented the traditional view that the developments of the voiceless segments shown in Table I were paralleled by those of the voiced segments dealt with in Table II. It is phonetically plausible that the *jotation* and/or palatalization of a stop would result in an affricate, and this is in fact well attested in historical linguistics. Therefore, what we expect is precisely what we find as far as the developments of *k* and *t* are concerned, but the same is not true of *g* and *d*. It is puzzling why we have here so few affricates but so many fricatives. Only in the cluster *zg* > *ždž* (by first palatalization and *jotation*) do we have any evidence whatsoever for *g* > *dž*. Elsewhere *g* under the same conditions gives *ž*; nowhere else is the proposed *dž* preserved. The second and third palatalizations of *g* produce an affricate only in P. The *dz* of M seems to be of various origins; therefore, its presence even in forms corresponding to either the second and third palatalization is not strong evidence for its PSl origin. The Glagolitic alphabet possessed a special character for the sound resulting from the second and third palatalization of *g*, but this is no proof that the letter in question stood for *dz*.

One way of solving these anomalies is the suggestion (Andersen, 1969) that PSl *g* at various times and conditions underwent lenition or spirantization (i.e., a weakening in articulation so that a stop becomes a fricative). One such lenition would involve *g* + *j* or a front vowel. Thus, in a form like PSl **gěnā* the sequence of sound changes would be **gěnā* > **ɣena* > *žena*. In other words, a voiced velar fricative developed into voiced alveopalatal fricative. There is then no need to assume an intermediate stage whereby *g* > *dž* and later *dž* > *ž*. At the time in

question the syllable structure of PSl prevented the sequence fricative + fricative. Therefore, *zg* could not change to *zɣ* but would remain *zg* regardless of what followed *g*. It is only in this one cluster that *g* > *dž* as according to the traditional view. At a later date *g* lenited again when followed by the new front vowels *ě₂* and *i₂* < *aį*. Therefore, according to this view the sequence of change was **nogaį* > **nogě₂* > **noɣě₂* > **noz'ě₂*, that is, a change of ɣ > *z'* (velar fricative to dental fricative), not the traditional *g* > *dz* > *z'*. Only P and perhaps St. Cyril's dialect missed this second lenition.

The tendency of *g* to undergo lenition seems to have been particularly active in the very heartland of PSl so that *g* > ɣ in all environments. This would explain why *g* is no longer a stop[16] in Ukr, Br, all of S R, Slk, Cz, UL, the NW dialects of Sln, and some of the NW Čakavian dialect of SC. This change apparently took place toward the end of PSl, for in some regions the old restriction against fricative + fricative still applied, but in others it did not. This would explain why in Ukr, most of Br, Slk and Moravian Cz, *g* in the cluster *zg* remained a stop but elsewhere *zg* > *zɣ*. Some examples will be helpful:

Late PSl	*Ukr*	*Slk*	*Cz*	*UL*
mozgъ	mi/ozk-	mozg-	mozk-	mozhy
ra/ozga	rizka	rázga	—	—
mězga	mizka	miazga	miezha[17]	mjezha[17]

A sequence like *zɣ* (later *zh)* would have been tolerated only after the loss of the weak jers completely reshaped the syllabic structure of Slavic speech. Therefore, the areas retaining *g* as a stop only in *zg* must have undergone *g* > ɣ before the loss of the jers; those with *zɣ* — after the loss of the jers.

Thus, by positing the existence of a single phonetic tendency (lenition of *g*), spread over many generations, Andersen is able in a very stimulating way to solve several "traditional" problems and bring various seemingly unconnected processes under one heading. This alone makes it worthy of mention although there are counterarguments.

Metathesis of *ort-* and *olt-*. *ort-* and *olt-* are traditional formulae in Slavic studies, and are used to indicate the following:

1. *t* stands for any consonant
2. the hyphen after the *t* indicates a syllable in initial position

The general tendency to tolerate only open syllables now begins to encompass syllables ending with a sonorant. Here the solution is not to eliminate one or more

[16] On the periphery of this core *g* > ɣ (Br, S R, Sln and Cakavian) but elsewhere *g* > ɣ > *h* which may well indicate that these latter regions experienced the lenition of *g* at an earlier date and have, therefore, had the time to carry the process one step further.

[17] *miezha* > *míza* in modern Cz, and UL *mjezha* is now spelled *měza*.

of the segments as would be the case with obstruents (thus, *tapta* > *tata*), but the desired pattern of CVCV is obtained by the process of metathesis, a switching in the order of the segments. That is, V+r+C becomes r+V+C; and V+l+C, l+V+C. All of these forms in Slavic underwent metathesis, but the vowel following the *r* or *l* differs. The nature of the vowel depends on the intonation of the syllable. An acute or rising intonation (◌̋) gave rise to *a* everywhere in Slavic. A circumflex or falling intonation (◌̂), on the other hand, produced differing results. In the south we again have *a,* but in the north (both E and W Sl) we have *o*. Thus, in summary,

**ŏrt-, *ŏlt-* > **rắt-, *lắt-:* everywhere
**ôrt-, *ôlt-* > **rât-, *lât-:* all of S Sl, Central Slk
**ôrt-, *ôlt-* > **rôt-, *lôt-:* all E Sl, W Sl

Understanding the development of the *ort*-formula forms is one of those instances where the traditional notation obscures rather than clarifies. We must bear in mind that Slavic possessed no mid vowels at the time of this metathesis, and that *o* here stands rather for the short low back vowel of the two-level vowel system. Therefore, if we write something more accurate like **ărt-* (in Stieber's system), the sequence of changes becomes more comprehensible. Obviously before metathesis occurred, the vowel in **ărt*-lengthened except in the north when the vowel was under falling intonation, that is, **ărt-* > **ārt-* > **rāt* (under rising intonation everywhere, and in S Sl under both intonations) but **ărt* > **răt* (without lengthening) > **rot* (E Sl and W Sl under falling intonation). Since, it is well established that every *ă* > *o,* there is no problem with this stage. On the other hand, using the notation **ŏrt* > **rắt* is essentially correct but misleading; there is not even a hint of an explanation for the *o* > *a* change.

Metathesis or pleophony of *tort*. The so-called *tort*-formula is the traditional way of referring to a specific type of syllable whereby *t* stands for any consonant, *o* for either *e* or *o*, and *r* for both *r* and *l*. Therefore, any mention of *tort*-forms refers not to this one sequence of segments but to four, that is, **tert, *telt, *tolt* as well as to **tort* itself. To be more precise *o* or *e* stand for the short low vowels of the PSl two-level vowel system; **tărt* or **tărt* would, therefore, be more accurate.

As with *ort-* and *olt-*, the *tort*-formula forms did not conform to the desired CVCV structure of PSl. Again one of the solutions is metathesis of the vowel and sonorant. In the Polish and Lusatian areas this metathesis is attested in its simplest forms without any additional changes in either of the metathesized segments. The remaining areas of Lekhitic exhibit some interesting peculiarities. In all of the south and the Cz—Slk area, we again find metathesis, but it was preceded by a lengthening of the vowel. In E Sl we have a unique solution known as pleophony whereby a second vowel is inserted after the sonorant. This new vowel, at least in its final development, will be the same as the vowel preceding the sonorant.

Proto-Slavic:	*tort*	*tolt*	*telt*	*tert*
P, UL, LL:	*trot*	*tlot*	*tlet*	*tret*
NW Lekhitic:	*tart*	*tlot*		*tret*
S Sl, Cz—Slk:	*trat*	*tlat*	*tlět*	*trět*
E Sl:	*torot*	*tolot*		*teret*

NW Lekhitic refers to Kashubian, Slovincian, Pomeranian and Polabian. The merger of **telt, *tolt* > **tlot* has few exceptions but the unmetathesized *tort*-forms are much more sporadic. Such forms are also attested in NW Poland.

Various unmetathesized forms (mainly of **tolt*) are also attested from eastern Bulgaria. In E Sl the merger of **telt, *tolt* > **tolot* is general, but there exist a few examples of the expected **telt* > **telet*.

The development of the *tort*-formula forms is another instance where reference to the two-level vowel system can be insightful. This applies specifically to the developments in S Sl and the Cz—Slk area. What occurred here was an unconditioned lengthening of the vowel before *r* or *l* + consonant. Thus, we have not **tort* > **trat* but (in Stieber's notation) **tărt* > **tārt* > **trāt* or **tĕrt* > **tērt* > **trēt* > **trět*. As applied to P where no lengthening occurred, we would have to rewrite **tărt* > **trăt* > **trot*. In E Sl, it would be **tărt* > **tărăt* > **torot*. An equation like **tort* > **trat* in S Sl is merely a kind of shorthand meaning that PIE syllables of the type **tort* are attested in S Sl as *trat*, all of which is accurate, but we cannot explain how the vowels of *tort, tert*, etc. developed without reference to that vowel system which existed in an intermediate stage.

The *telt*-formula forms in which the initial consonant is either *č, š,* or *ž* present special difficulties which become apparent if we compare, for example, the cognates Ukr, R *žolob,* P *żłób*, UL *žłob* and Cz *žlab*. It is immediately evident from the syllabic shape of each that we are dealing with a classical *tort*-formula word, but what would the proto-form have been? The presence of the back vowels in the modern languages would indicate a *tolt*-type of syllable, but here specifically **žolbъ*. However, *ž* could not have arisen if there had always been a back vowel in this root; therefore, the root must have been **želbъ* at an earlier date. A change of the type **želbъ* > **žolbъ* (or *žălbъ* > *žălbъ*) makes sense phonetically assuming that *l* here was velarized, and this is quite logical given the presence of this type of *l* throughout much of modern Slavic. This change is more frequently encountered in the north than in the south as seen by the reflexes of the same root in S Sl: Blg, M *žleb,* SC *žlêb,* Sln *žlẹ̑b* and Central Slk *žľab* < *žlěb* all of which are derived from **želbъ* without any backing of *e*. Further examples are **čelnъ* > OCS *člěnъ,* Blg, Cz, Slk *člen,* Sln *člẹ̑n* vs **čelnъ* > **čolnъ* > SC *člân,* Cz *článek,* P *członek,* UL *člónk*. R *člen* is Church Slavonic borrowing, OCS *žlasti* and *žlěsti*< **želd*+ *ti*.

The velarizing influence of *l* in *telt* is more evident in E Sl, for the vowel here backs in nearly all such forms, that is, *telt* > *tolt* > *tolot* regardless of what consonant preceded *e*. The forms which remained unaltered are so few in number that it is really not feasible to set any rules. Some examples are R *selez'onka,* Ukr

selezinka vs P *śledziona,* Cz *slezina,* SC *slezìna* from the root **selz-* 'spleen'; Ukr *oželed',* R *oželedica* vs P *żłódź* from the root *želd-* 'glare ice'.

The stress patterns exhibited by *tort*-formula forms in E Sl are also of considerable importance in historical linguistics. Sometimes the stress will rest on the new vowel after the *l* or *r*,[18] that is, **bőlto* > *bolóto* or **bĕrza* > *beréza.*

This is typical of all *tort*-formula forms which before pleophony were characterized by rising (or acute) intonation and stress fixed to the syllable bearing this pitch. If, on the other hand, the former *tort*-form bore falling (or circumflex) intonation, the stress after pleophony will be on the vowel preceding the *r* or *l* as in *zóloto* < **zolto.* Naturally, not every form containing a *tort*-syllable bore the stress on that specific syllable. The stress could also fall on a prefix, suffix or desinence as, for example, in **pământъ, *korvĭna, *melkǫ* > Ukr *pámoroz', korovýna, molokó.* Wherever a form contained an unstressed *tort*-formula syllable in PSl, neither vowel of the pleophonied form will be stressed in modern E Sl. In the following examples ◌̋ = rising intonation, ◌̂ = falling intonation, ◌́ = place of stress without any intonation.

PSl	*Ukr*	*P*	*Cz*	*SC*
bêrgъ	béreh	brzeg	břeh	brêg
bôrdǫ	bórodu	brodę	bradu	brâdu
bĕrza	beréza	brzoza	bříza	brȅza
xôldъ	xólod	chłód	chlad	hlâd
zôlto	zóloto	złoto	zlato	zlâto
gôrdъ	hórod	gród	hrad	grâd
gŏrdja	horóža	grodza	hráz	grâđa
mĕlti	molóty	mleć	mlíti	mlȅti
môltъ	mólot	młot	mlat	mlât
gŏrxъ	horóx	groch	hrách	grȁh
mŏrzъ	moróz	mróz	mráz	mrȁz
melkó	molokó	mleko	mléko	mléko
pĕlva	polóva	plewa	pleva	plȅva
poltьnó	polotnó	płótno	plátno	plátno

Note again, the merger of *telt* and *tolt*-forms in E Sl.

Note the difference of stress in Ukr caused by the original intonation in PSl. This distribution of stress in the E Sl reflexes of *tort*-formula forms is the last process attesting to intonational distinctions in E Sl. Some later processes may have depended on differences in pitch, but this is no longer demonstrable whereas the stress of *mólot* as opposed to *molóty,* etc. is explainable only in terms of an

[18] Syllables of the type vowel + *r, l* functioned as a diphthong and when stressed could have either rising or falling pitch, but ◌̋ (long rising) or ◌̂ (long falling) here applies to the whole syllable. It does not imply an overall lengthening of the vocalic nucleus as in all *tort*-forms in S Sl and the Cz—Slk area.

underlying intonational difference. These stress differences in E Sl correspond with a high degree of consistency to intonational distinctions still existing in SC.

In Cz it is normal for a long vowel with acute pitch to retain its length, thus, Cz *ě* > *í* (as in *bříza* or *mlíti*) or *é* after *l*. This relationship is quite consistently retained; in the examples cited only *pleva* deviates. We would expect a long vowel here which is in fact attested in Old Cz.

The SC examples are cited in their Ekavian or Serbian forms and are normally written in Cyrillic. Note again the regularity: PSl circumflex is reflected as ~ (long falling) and acute as ˝ (short falling); ´ (long rising) in *mléko, plátno* is the result of a later stress retraction to a long vowel.

The shift from quantitive to qualitive contrasts in the vowel system. We have seen (pp. 97-101) that in Early PSl there developed a two-level vowel system containing the following phonemes: *ě̆ ŭ̆, æ, ă̆* for which there are various means of notation. This system was further altered when *ū* > *ȳ* and all diphthongs were lost. This latter change brought into existence the following: *ū*$_2$ < *aų, oų, eų; ī*$_2$ < *eį* and also < *aį, oį* in a limited number of instances (p. 118-19); *ǣ*$_2$ (traditionally *ě*$_2$) < *aį, oį*. Since new *ī* and *ǣ* merged with *ī* and *ǣ* already in existence, *ī* on the diagrams stands for both *ī*$_1$ and *ī*$_2$ and *ǣ* for both *ǣ*$_1$ and *ǣ*$_2$ (traditionally *ě*$_1$ and *ě*$_2$). To this were added *ę̄, ǭ* (see p. 126). For the period under discussion, we may then posit the following system:[19]

ī̆			ȳ			ŭ̄
	ę̄				ǭ	
		æ̆		ă̆		

This system in all likelihood was not uniform throughout the entire Slavic speaking area. These differences would appear in:

— The articulation of the nasals differed from region to region as regards the feature mid vs low (for *ę*) or high vs mid or low (for *ǫ*). *ǫ* also differed by the absence or presence of rounding.

— *ȳ* < *ū*$_1$ differed from region to region as regards the degree of fronting. As indicated elsewhere, the precise phonetic value of *ȳ*, at least in the early stages of its existence in PSl, is still very problematic. It may even at this stage have retained some degree of rounding.

The major feature of this system is that every vowel except *ȳ, ę̄, ǭ* occurred with length or brevity as one of its distinctive features.

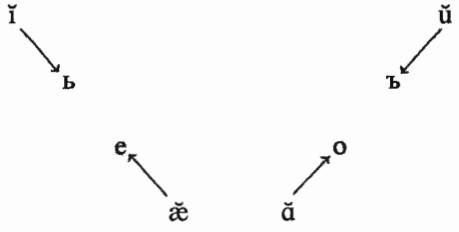
**līstī* (nom. plural) vs **lĭstī* (nom. plural): 'leaves' vs 'deceptions'
**plūtī* (infinitive) vs **plŭtī* (gen. sing.): 'to navigate' vs 'flesh'

[19] See also the charts on pp. 98 and 117 for a summary of the origins of each phoneme.

**nāsŭ* (gen. plural) vs **năsŭ* (nom. sing.): 'us' vs 'nose'
**nāsŭ* (aorist) vs **năsŭ* (past part. active): 'I carried' vs 'having carried' (masc. sing.)

Thus, *līstī* differed from *lĭstī* only by one factor — the first example contains *ī* in the root; the second *ĭ*. The presence or absence of vowel length in a given form, therefore, allowed speakers to distinguish the meaning of one form as opposed to another. Any language, such as PSl at this period, which makes use of this feature of length in vowels in the way just described is said to have distinctive quantity, that is, the amount or duration of the vowel is a decisive factor in communication.

Now the system of quantitive distinctions changes; the short vowels (*ĭ, ă, ŭ,* ă) no longer differ from their long counterparts simply by being shorter but by being articulated at a slightly different level. This type of contrast between vowels is referred to as qualitative — a difference in the very nature (that is, quality) of the vowel itself. This type of contrast had always existed in the vowel system as, for example, *nīčĭtă* 'nothing' differs from *năčĭtă* 'something' only by the contrast of *ī* vs ă, that is, high vs low. Now this system of qualitative distinctions is extended to include all the formerly short vowels, and they become distinct from their long counterparts by being less tense and articulated more in the mid range of vowels. That is, *ĭ* and *ŭ* become lower, but ă and ă, higher or diagrammatically as follows:



On the other hand, the long vowels retain their position at the extremes of the vowel triangle. That is, *ī, ȳ* and *ū* all remain high vowels, and ā remains a low one but more centralized. Even in the case of *ē,* which has such a myriad of reflexes, there are many instances permitting us to reconstruct either a high front or low front vowel as one of the result of this Late PSl vowel shift. Finally the whole vowel shift may be summarized in the following chart.

ī	ĭ	ȳ	ū	ŭ	ē	ă	ă	ā	ă	ǫ
i	ь	y	u	ъ	ę	ě	e	a	o	ǫ

Since length vs brevity is no longer relevant, it is unnecessary to use any diacritics like *ā* or *ŏ* although the formerly long vowel remained inherently long, and the short, inherently short — at least, until further changes altered the situation.

For those familiar with any of the modern Cyrillic alphabets, it is often confusing, at least initially, to have *ъ* and *ь* used exclusively to represent vowels. Both of these vowels are extremely important in the later history of PSl and are referred to as the back (*ъ*) and front (*ь*) jer. St. Cyril devised two symbols for these, and they were definitely intended for use as vowels.

We can now recognize in this new system the one traditionally used by most textbooks in the reconstruction of PSl forms. In point of fact, however, this system came into existence only toward the end of PSl. It is also the system used as the starting-point in the historical phonology of any of the individual Slavic languages. That is to say, a historical grammar of Cz, for example, will cite this system as the original one which gave rise to the vowel system not only of the modern literary language but also of all the dialects of Cz.

This approach is basically accurate insofar as all areas of Slavic at one time possessed this vowel system. It is, however, inaccurate to give the impression that this system existed throughout almost the entire history of PSl. In fact, it came into existence rather late, in the period of dialectal disintegration. It is, therefore, also erroneous to suppose that this system was uniform everywhere in the Slavic speaking world.

Regional deviations in the basic allophones of *ę, ǫ* and *y* have already been mentioned. Similar considerations are particularly relevant as regards *ъ* and *ě*. Since *ъ* developed from a rounded vowel, it could also be a rounded vowel, lower but still rounded. However, rounding is retained in E Sl, Central Slk, M and probably UL. Elsewhere *ъ* shows no trace of rounding. Whether *ŭ* developed first of all to a mid back vowel with rounding everywhere and lost its rounding in all but the areas mentioned or whether it developed directly from *ŭ* to an unrounded vowel in these areas is now impossible to unravel. This, however, is not the point. The point is rather that all Slavic dialects possessed for a time a phoneme which was a direct reflex of PIE *ŭ* (but lower) and *ъ* is merely the symbol for this phoneme, the basic allophones of which marked regional variation.

The vowel *ě* presents us with even a greater variety of problems. No other PSl phoneme exhibits such a broad range of reflexes in the modern languages as does *ě* — all the way from a high front vowel (Ukr *ě* > *i*) to a low back one (P *ě* > *'a*) with almost every possibility (including diphthongs) in between. For these reasons, it is very doubtful whether *ě* was ever characterized by even remotely uniform phonetic realizations (allophones) throughout Slavic. This is why it is preferable to restrict the use of the symbol *ě* exclusively to this final period of PSl. It is only reasonable to assume that a phoneme with such wide regional variation would by definition come into existence only in the period of dialectal breakup and also as a result of the rebuilding of the entire vocalic system. It follows, therefore, that in

spite of a long-standing tradition to use the symbol *ě* for the period prior to the vowel shift, a different symbol should be used for the PSl continuant of PIE *ē* (e.g. *ą̄, ǣ, ā̆* or *ē̆*) instead of using *ě* for the entire history of PSl.

There is also the possibility that the R and Br feature known as *akan'e* had its origin in the PSl vowel shift. Supporters of this theory would argue that *ā̆* did not develop to *o* in every position but only when stressed. This would mean that in those central areas of E Sl later to become the dialects of NE Br and SE R, *ā̆* never acquired rounding in unstressed position. This unrounded vowel may have been identical with that which developed from *ā* or it may have remained a separate entity for some time before merging with unstressed *a* < *ā*.

For instance, in modern R the prestressed vowels of *sová* < **sāvā* and *travá* < **trāvā* merge completely. The whole problem regarding the origin of *akan'e* lies precisely in trying to establish by what stages did this merger come about. Traditionally it was generally believed that forms like *sova* at one time existed in all areas of E Sl as elsewhere in Slavic. According to this explanation, the loss of rounding by an unstressed *o* is a later regional development not connected to any PSl process. The opposing point of view says that the absence of rounding in *savá* and the like is in reality an archaism derived directly from the unrounded *ā̆* of PSl. The later merger of the unstressed vowels of *sová* and *travá* resulted not from some process that occurred with *o* < *ā̆* but from the reduction of *a* < *ā* in unstressed position, as R tends to reduce all unstressed vowels.

The problem in its entity is very complicated and cannot be dealt with here. It is mentioned only as an example of some of the difficulties connected with the PSl vowel shift and also as an example of the fact that many of the phenomena in the modern languages had their origin in PSl.

The development of *tъrt*. As with *ort-* and *tort-*, *tъrt-* is a traditional formula covering four distinct syllable types. Again *t* stands for any consonant; *ъ* represents either *ъ* or *ь*, and *r* either *r* or *l*. The sequences of vowel + liquid in the *tъrt*-formula were functional diphthongs and as such were susceptible to simplification as were the other diphthongs both real (*aį, aų, eį, eų*) and functional (*or, ol, el, er*). However, the sequences *ŭr, ĭr, ŭl, ĭl* from which *ъr, ьr, ъl, ьl* later arose, differed from these other diphthongs in that both components were possibly of equal sonority; either could form the syllabic nucleus of the diphthongs, or the sonority could be shared evenly by the two components.

This latter suggestion may well explain why in large areas of Slavic, *tъrt* retains its original shape unaltered, that is, *t* + *V* + *r, l* + *t*. This is the basic solution in all of E Sl and Lekhitic; however, there is considerable variety in the nature of the vowel preceding the liquid. In E Sl we consistently find *e* < *ь* and *o* < *ъ* which are the regular reflexes for strong *ъ* and *ь* in all other environments. In Lekhitic, on the other hand, we find *i, e, o, a,* or *u* (*e, o,* and *a* may be either palatalizing or nonpalatalizing) depending on the environment. In those instances where *i* or *u* are attested, it is quite probable that these vowels are a direct con-

tinuation of the early PSl state of affairs, predating the rise of the jers. That is to say, modern P *wilk* most likely derives directly from **vĭlkŭ* without having passed through the stage **vьlkъ*.

The other major development with *tъrt* is reminiscent of the monophthongization of *ai, au,* etc. whereby the vowel and the glide merge to form a single vowel, that is, *tъrt, tъrt* > *tr̥t* and *tъlt, tъlt* > *tl̥t*. This was the situation in all of S Sl and in the Czech—Slovak region. The same state of affairs is often posited for Lekhitic so that in a historical grammar of P one often encounters such notations as **vr̥'xъ, *vr̥'ba, *ml̥va, *dl̥'gъ* instead of **vьrxъ, *vьrba, *mъlva, *dьlgъ*. There is, however, very little evidence that such a phase in the development of *tъrt* ever existed in this region of Slavic. If *r̥* and *l̥* did arise briefly in Lekhitic, then it is strange that in the vast majority of instances *r̥* and *l̥* would again break down into V + *r, l* (instead of *r, l* + V) and that the resulting vowel is again in the majority of instances of the same front (palatalizing) or back (nonpalatalizing) nature as contained in the original formula. That is, **sьrpъ* > *sierp* in which the vowel still precedes *r* and still palatalizes the preceding consonant as would be expected from the reflex of any PSl front vowel in P. This means that if we posit *r̥* or *l̥* for Lekhitic we must also posit a front and back variant of each, that is, **sr'pъ* > *sierp* as opposed to **bŗzo* > *bar(d)zo*. However, such a contrast as *r̥* vs *r̥'* or *l̥* vs *l̥'* is unattested not only in Slavic but in general throughout the languages of the world. True, there are counterexamples in which *tьrt* or *tьlt* develop to produce nonpalatalizing vowels but such instances are not general Lekhitic but usually limited to some specific region, thus, **tvьrdъjь* > *twardy* (standard P) but *cv'ardi* (Kashubian), *t'ordə* (Polabian) or **vьlna* > *wełna* (standard P) but *v'ołna* (Mazovian). There are, nevertheless, no examples of either *tьrt* or *tъrt* developing to give *r* + V which would be perfectly feasible if we were in fact dealing with *r̥* instead of *ь* or *ъ* + *r*.

There are, on the other hand, examples of **tьlt* and **tъlt* developing to produce *tłut* but only when the first consonant was a dental, and again this is not an overall Lekhitic development. It is limited to the southeastern corner of the area from which modern standard P evolved. Elsewhere (Kashubian, Slovincian, Pomeranian, Polabian) **tьlt* and **tъlt* merge giving *tołt* and later diphthongs of the type *aų* or *oų,* but there was obviously no metathesis in these areas. The metathesis that does occur is limited to forms with a merger of *dьlt, dъlt* (*d* = any dental). The question is why did metathesis occur only in this one environment and not elsewhere. The problem remains unsolved.

The various reflexes of **tъrt* are closely connected with the development of *trъt* (again a cover formula for **trъt, *trьt, *tlъt, *tlьt* in which *t* = any consonant), and these are usually discussed together. In point of fact, however, the development of *trъt*-formula syllables does not belong to the history of Late PSl but to the histories of the individual Slavic languages, that is, to the period after the loss of the jers. Before this process took place, syllables of the type **trъt* were perfectly in accord with the syllable structure of PSl and, therefore, not subject to

any restructuring. Nevertheless, the reflexes of *tъrt* and *trъt* are interwined to such an extent that it is necessary to treat them together. The reflexes of the **trъt*-formula forms are dependent upon whether the jer vowel is in strong or weak position,[20] and this will be indicated simply by writing "strong" or "weak" before **trъt*. On the other hand, there is no need for this with **tъrt* for strong vs weak is never a factor here.

There are three basic types of developments observed in the reflexes of *trъt*. These are:

Region 1 takes in all of S Sl and Central Slk on which standard Slk is based. Here the distinction of strong vs weak **trъt* as well as that of front **trьt* vs back *trъt* are all lost giving a single **tr̥t* which then merges with **tr̥t* < **tъrt, tъrt*.

Region 2 encompasses the northeast of E Sl and is reflected in modern literary R. In this area the strong vs weak contrast is lost but not that of back vs front. The interesting feature here is that weak **trъt* and *trъt* develop as if strong so that both variants of **trъt* > *trot* and of **trьt* > *tret* but the back or front quality of the original vowel is retained. These forms never merge with the reflexes of **tъrt* etc. from which the vowel is always before *r* or *l* whereas from **trъt* the vowel always follows.

Region 3 includes Ukr, Br, Lekhitic, UL, LL and Cz. Here both strong and weak **trъt* can be said to develop in the normal way in that *ъ* and *ь* in strong position will give the same vowel as is expected from any strong jer in the area concerned, and in weak position *ъ* and *ь* are lost. Since both weak **trъt* and **trьt* > **trt* the former back vs front contrast is usually obliterated except in those few instances where *r* or *l* in **tr'ьt, *tl'ьt* retained their palatalization. Syllables of the type *trt* are later subject to three possible developments:

1. **trt* > **tr̥t* but **tr't* > **tř́t* is attested only in Cz. Note the difference between this and Region 1 which has *tr̥t* also from strong **trъt, *trьt* as well as weak **trъt* whereas Cz does not.
2. **trt* is retained by and large intact in P, UL, LL but the resulting clusters with *r* or *l* are often subject to various kinds of restructuring. See No. 5, p. 158.
3. **trt* > **trVt* (or more rarely *tVrt*) in Br, Ukr, E Slk, Kashubian and also possibly in Polabian. The new insert vowel is usually different from that expected from strong *ъ* or *ь* unless by analogy to forms of the same root derived from strong **trъt, *trьt* with the expected reflexes for jers.

SUMMARY

For the sake of convenience and easy reference, the following symbols will be used:

[20] Before studying this section, it is necessary to know the meaning of such terms as strong or weak jer and the use of the symbols *ъ, ь,* etc.

d = any hard dental
p = a hard or soft labial
k = any velar
č = *č*, *š* or *ž*
t = any consonant
' = palatalization

A few words of explanation may help in understanding the formulae given below. Since *t* = any consonant, *t* in *tьrd* (3b) means that the nature of the consonant preceding *ьr* is not a factor. *d* means that *tьrd* develops in the way shown whenever a hard dental follows *ьr*. In *tьrk, p* (3c), *k* can be only a hard velar but *p* either hard or soft. However, in *tьrt* (3d), the final *t* = any consonant not already defined in No. 3, that is, any consonant except *d* + *k, p*. The same applies to *pьlt* (4g); here *t* = any consonant except *d* which already defined an environment in 4f.

For the sake of conciseness, *(s)* or *(w)* will be used to stand for strong or weak **trъt* (Nos. 1 and 2), but as stated this distinction is irrelevant with the **tъrt*-formula forms.

The reflexes given for each language are only orientational giving the basic syllabic shape or proto-forms from which the modern attested forms are derived.

Note that most of the northern languages in essence maintain the distinction between the four syllabic types whereas all of the south along with Slk merge all four. Cz occupies, as it were, a transitional zone; here **trъt (w), *trъd (w), *tъrt, *tьrt* > **tr̥t* but **trъt (s), *trьt (s)* and **trьk, p (w)* remain distinct; **tlъt (w) *tlьt (w)* and **pьlt* > **tl̥t*; all other **tъlt* and **tьlt* > **tlŭt* vs **tlъt (s)* and **tlьt (s)* > **tlet*.

Of historical significance is the complete merger of **tъlt, *tьlt* > **tъlt* in E Sl. Partial mergers are also found in P and both UL and LL, such as **tъrt* and **tьrd* > **tъrt* or **dьlt, *dъlt* > **dъlt*.

	PSl	*Cz*	*P*	*UL, LL*	*Br, Ukr*	*R*	*S Sl, Slk*
1. *(a)*	trъt *(s)*	tret	tret	tro/et	trot	trot	tr̥t
(b)	trъt *(w)*	tr̥t	trt	trt	tryt		
(c)	trьt *(s)*	tr'et	tr'et	tr'et	tret	tr'et	
(d)	trьd *(w)*	tr̥d	trt	tret	tryt		
(e)	trьk/p *(w)*	tr'k/p	tr'k/p				

	PSl	*Cz*	*P*	*UL, LL*	*Br, Ukr*	*R*	*S Sl, Slk*
2. *(a)*	tlъt *(s)*	tlet	tlet	tlo/et	tlot	tlot	tl̥t
(b)	tlъt *(w)*	tl̥t	tlt	tlt	tlyt		
(c)	tlьt *(s)*	tlet	tl'et	tl'et	tlet	tl'et	
(d)	tlьt *(w)*	tl̥t	tl't	tl't	tly/it		

	PSl	*P*	*LL*	*UL*	*E Sl*	*Cz*	*S Sl, Slk*
3. *(a)*	tъrt	tart	tart	tort	tort		
(b)	tьrd	tard	tard	tord		tṛt	tṛt
(c)	tьrk/p	t'er'k/p	t'er'k/p	ter'k/p	tert	(čert)	
(d)	tьrt	tirt	t'ert	t'ert			

	PSl	*P*	*LL*	*UL*	*E Sl*	*Cz*	*S Sl, Slk*
4. *(a)*	pъlt	polt	po/alt				
(b)	kъlt	k'elt	k'e/alt	tolt			
(c)	dъlt	dlut	dlut		tolt *(R)*	tlŭt	
(d)	dьlt	dlut	dlut	dolt	tovt *(Ukr)*		tḷt
(e)	čьlt	čolt	čolt	čolt	towt *(Br)*		
(f)	pьld	peld	pold	pold		pḷt	
(g)	pьlt	pil't	p'el't	p'el't			

NOTES:

1. The retension of *r'* in both P and Cz (1e; 3c) before labials and velars is by no means a regular process.

2. In P *r'* > *ř* > *ž* (spelled *rz*) and in Cz *r'* > *ř*.

3. Both UL and LL at one time also had *r'* < *tьrt* under much the same conditions as in P, that is, **tьrp/k* > **t'er'p/k*. Up until 1949 UL still retained this feature as an orthographic archaism, for example, *wjeŕba, mjeŕwa, swjeŕbjeć* or *wjeŕch*. For LL although the evidence is not quite so straightforward, there is good reason to believe that **tьrp/k* > **t'er'p/k*.

4. In Cz *čṛt* > *čert* is a regular process. It is also attested in Slk but only sporadically.

5. In P, UL and LL the developments of **trъt, *trъl, *tlъt, *tlъt* when *ъ, ь* are weak (Nos. 1b, d; No. 2b, d) are perfectly regular in the sense that *ъ, ь* are lost. Later, however, the resulting consonantal clusters are often simplified. A vowel may be inserted either before or after the *r* or *l*. One or more of the consonants surrounding the *r* or *l* may be either dropped or rearranged, or even the *r* or *l* may be dropped. Some examples are: **blъxa* > **blxa* > **bxa* > UL, LL *pcha* (with *b* > *p* by devoicing assimilation), or **blxa* > **bxla* > P *pchła; *slьza* > **slza* > P *łza,* LL *łdza,* UL *sylza* or *sliza* (dialectal). Both UL and LL in contrast to P often have a vowel insert after the liquid: **grьměti* > **gr'měti* > P *grzmieć* but UL *hrimać*, LL *grimaś; *xrьbьtъ* (or **grьbьtъ*) > **xr'b'et* > P *grzbiet* but UL *chribjet,* LL *kśebjat; *jablъko* > P *jabłko* but UL, LL *jabłuko* and also *jabłyko, jabłoko; *blьvati* > UL *bluwać.*

6. In S Sl and Slk, the proto-forms **tr̥t* and **tl̥t* frequently undergo further developments. **tr̥t* is remained in Slk, SC, and M. Sln still retains spellings like *vrba, vrh, trg* but this is an orthographic archaism; *r̥* has become *ər*. **tl̥t* is retained in Slk but elsewhere *l̥* is lost. **tl̥t* > SC *tut,* Sln *tolt* (pronounced *towt*), M *tolt*. In Blg both *r̥* and *l̥* disintegrate into either *rъ, ъr* or *lъ, ъl* depending on whether one or several consonants followed *r̥* or *l̥*. If one, then *r̥* > *ъr*; if more, then *rъ,* that is, **tr̥t* > **tъrt* vs **tr̥tt* > **trъtt*. The same principle applies to *l̥*.

The development of new long vowels. In a previous section we saw that the vowel system of Late PSl was completely restructured in such a way that quantity was no longer distinctive. If then distinctive vowel quantity was lost even before the end of PSl, how are we to explain the existence of this very same feature in modern Cz, Slk, Sln and SC? We know that distinctive length also existed in P until the end of the fifteenth century, and a similar situation is usually posited, at least, for UL.

The fact is that distinctive vowel length as attested in the languages just mentioned is only very remotely connected with the PSl system in existence before the shift from quantity to quality. After this shift for some time to come, the formerly long vowels remained inherently long, but since this length was irrelevant it too was lost in all but a few specific environments. There are, therefore, relatively few examples where a long vowels in the modern languages can be traced back directly to a PSl long vowel before the shift to qualitative distinctions. The conditions under which length was preserved may differ widely from region to region, but there are some environments where the same rule applies throughout. Nevertheless, all cases of preservation of length were quite predictable in terms of other factors (stress, pitch, syllables per word, etc.); this preserved length was, therefore, nondistinctive and irrelevant in the vocalic system. It follows then that when we speak of Slavic languages with distinctive vowel quantity, we are not dealing with languages that preserved this feature but rather with languages that reestablished it.

This reintroduction of distinctive length in vowels can have occurred then only as the result of some later processes, and as may be expected with developments of that period, they show considerable dialectal variation. The history of the reestablishment of distinctive quantity in certain areas of Slavic cannot be understood unless studied in connection with the development of the entire prosodic system of PSl, at least, in its last phases. Because of the complications of this system, a separate chapter will be devoted to it; at this point, therefore, only the briefest outline will be attempted.

In order that distinctive vowel length be reestablished, it was necessary that new long vowels come into existence. There are three basic sources of this new length, that is, there were three developments which produced long vowels. In chronological order they are:

1. Neo-acute length: This lengthening occurs as the result of a stress shift from a weak jer to the vowel in the preceding syllable. The vowel receiving this new stress is then lengthened and receives a rising intonation.

2. Contraction: In Slavic linguistics this refers to the contraction resulting from the loss of an intervocalic *j*. That is, two vowels formerly separated by *j* merged to form one long vowel, thus, *ŭjŭ* > *ŭŭ* > *ū*.

3. Compensatory lengthening: This refers to the lengthening of a vowel which may result when the weak jer in the following syllable was lost. Thus, the loss of *ъ* or *ь* in a form like **dǫbъ* or **mǫžь* may cause *ǫ* to lengthen, but the conditions vary greatly from region to region.

Let us now apply this information to some concrete examples. This can be illustrated by using three case forms of the same noun.

	1	*2*	*3*	*4*
Nominative singular:	*kăstĭ	*kostь	*kostь	*kostь
Genitive singular:	*kăstī	*kostī	*kosti	*kosti
Genitive plural:	*kăstĭjĭ	*kostьjь	*kostьjь	*kostī

STAGE 1: **kăstĭ* and *kăstī* differ only on the basis of *ĭ* vs *ī*, that is, vowel length is distinctive.

STAGE 2: After the shift from quantity to quality the formerly long vowels remained inherently long, but not *ī* vs *ь* differs in quality.

STAGE 3: Since the length of *ī* was nondistinctive or purposeless, it could be disregarded. Length was, therefore, lost.

STAGE 4: Contraction of the genitive plural *ьjь* > *ī* produced a new long vowel contrasting with the short vowel of genitive singular. That is, **kostĭ* vs **kostī* differ only on the basis of *ĭ* vs *ī*, and vowel length is, therefore, distinctive again.

Contraction was used here as an example of the creation of new long vowels, for it seems to have been the most important single factor in the reestablishment of distinctive length. In fact, as a generalization it can be stated where contraction is absent, distinctive length is also absent, thus, **pojasъ* > Cz, Slk *pás*; P, UL, LL *pas*; SC *pâs* (and *pȍjās*); Sln *pâs* (and *pojâs*) as opposed to R, Br, Ukr, Blg and M *pojas*. It is the existence of contracted forms like *pas* (along with other data) in the Lusatian languages which lead us to believe that distinctive length also existed there.

The palatalization of consonants by front vowels. Before discussing this development of Late PSl, it is necessary to know something about the syllabic structure or possibilities of the language at this period. This refers to the fact that not every consonant could be followed by every vowel. This is best explained by dividing the consonants into four groups and specifying the vowels permitted to

follow the members of each group as will be detailed below. For ease of reference this summary will be referred to as Table 1.

TABLE I: THE SYLLABIC POSSIBILITIES OF LATE PROTO-SLAVIC

1. The velars: *k, g, x* + a, o, *ǫ, ъ, y, u*₂ (< *aų*).

No velar could be followed by a front vowel, for all such sequences had already undergone either the first or second palatalization.

2. The palatals are those segments resulting from *jotation,* from the first palatalization of velars and *j*: *č, š, ž, j, n', l', r'* + *i,* (*i*₁, *i*₂ < *eį*), *ь, e, ę, ě*₃, *a* (< *æ* or *ě* after causing the 1st palatalization), *ǫ, u*₂ (< *eų*).

Here, of course, belong the reflexes of *dj* and *tj* (also *kt̆, gt̆*) which by this time already differed from region to region and the reflexes of labials + *j*. In those situations and areas where epenthetic *l'* occurs, this *l'* will be treated exactly like *l'* < *lj*. Where epenthetic *l'* is lost (or failed to develop), mainly in W Sl, there will be *m', b', p'* and *v'*. That is, from **zemja* there can be either **zeml'a* or **zem'a.*

3. The reflexes of the second and third palatalization of velars: *c, z'* or *dz, s'* or *š* + *ě*₂ (< *aį*), *i*₂ (< *aį*), *ь, e, ę* or *ě*₃, *a, ǫ, u*₂ (< *aų*), *i* (of analogical origin).

Only *ě*₂ can follow one of these within a root and *ī*₂ (< *aį*) in final position. All the other vowels occur exclusively at morpheme boundaries and are of analogical origin.

4. All other consonants: *t, d, s, z, b, p, m, v, n, l, r* + *i*₁ and *i*₂, *ь, e, ę ě,* and *ě*₂, *a, ǫ, ъ, y, o, u*₂ (< *aų*) but not *ju*₂ < *eų*, for this latter would bring about *jotation* of the preceding consonant and this would place the result in No. 2.

Comments and explanations. GROUP 1: Since in PSl at this time no velar could be followed by a front vowel, any palatalized velars which may occur in the modern Slavic languages are of later origin, usually as the result of the formation of some new front vowels, for the most part *i* < *y* and *e* < *ъ*.

GROUPS 2 and 3 contain only palatal and palatalized phonemes. They cannot, therefore, be repalatalized by any front vowel. As regards the later history of these segments then, we are interested only whether they retained or lost their original palatal(ized) nature.

GROUP 4: Only members of this group can be subject to an overall palatalization and only when followed by a front vowels, and this will be discussed in greater detail below.

Note that it is not customary in Slavic linguistics to indicate the palatal(ized) nature of all the phonemes represented in Groups 2 and 3. For example, at this period in Slavic history *c* was palatalized in every environment, but this fact is not indicated in transcription. We write, therefore, *c*, not *c'* — unless perhaps for special emphasis. The palatalization is marked only with *s', z'* (2nd and 3rd palatalization of *x, g*), l', n', r' (< *lj, nj, rj*) and for W Sl only with *m', b', p', v'*

(< *mj, bj, pj, vj*). This is necessary with these phonemes in order to distinguish them from the nonpalatalized *s, z, l, n, r* or *m, b, p, v*. On the other hand, it is not necessary with *c, č*, etc. because Slavic then possessed no such entity as a nonpalatalized *c* or *č*. With these latter, therefore, no confusion is possible.

From the above, it is evident that PSl provided very few examples of the type encountered in modern R whereby one phoneme differs from another only by the presence or absence of palatalization as in such oft cited minimal pairs as *брат* vs *брать, стан* vs *стань, галки* vs *гальки, нос* vs *нёс, кров* vs *кровь, рад* vs *ряд, мат* vs *мать* or *мят* vs *мять*.

In PSl at this time such contrasts were possible only in the following instances:

(a) *l', n', r'* vs *l, n, r*: present in all dialects
(b) *s'* vs *s*: present in E and S Sl but not in W Sl where *x* > *š* by second and third palatalizations
(c) *z'* vs *z*: present only in these dialects where *dz* > *z'*
(d) m', b', p', v' vs *m, b, p, v*: present only in W Sl

The so-called *jat' three* (*ě*$_3$ — cited in groups 2, 3) is not a separate phoneme of PSl. It develops exactly as do *ě*$_1$ or *ě*$_2$; it is marked *ě*$_3$ because of its different origin. It occurs only in three case endings (therefore, only in final position) and only in the northern Slavic languages. Further, it arises in environments where on the basis of evidence from other Indo-European languages we would expect not *ě* but *ę* which in fact is precisely what we find in S Sl.

Gen. sing. of *jā*-stems	**zeml'ę*	vs	**zem'ě*$_3$	or	**zeml'ě*$_3$
Nom.—acc. plural of *jā*-stems	**dušę*	vs	**dušě*$_3$		
Acc. plural of *jo*-stems	**kon'ę*	vs	**kon'ě*$_3$		

In group No. 1 there are no syllables formed with *ě*$_1$ for PIE *ē* > *a* after a palatal. As shown, there are many examples of this with *ē* after it brought about the first palatalization of velars: **krīkēteį* > **kričati*, not **kričěti*. St. Cyril devised only one symbol for *ě, jě* and *'a, ja* so that in Glagolitic one would write *zeml'a, časъ, jěsti, jablъko* — all with the same symbol whose precise phonetic value cannot be defined now. The point is that in this group (No. 1) there are no examples of *ča* vs *čě*$_1$ or *l'a* vs *l'ě*$_1$, etc.

The same does not hold true for *ě*$_2$ or *ě*$_3$, which are of later origin. Neither of them merge with *a*, and *ě*$_3$ may even contrast with *a* (but only in N Sl) both after palatal and palatalized phonemes, thus, **duša, *ovьca* (nom. sing.) vs **dušě*$_3$, **ovьcě*$_3$ (gen. sing.). *ě*$_2$ could occur only after a consonant of group No. 3, but here we encounter no mergers of *ě*$_2$ and *a*, for example, **vьlcě*$_2$*xъ* < **vĭlkaįxŭ* vs **granicaxъ* < **grānīkāxŭ*.

The fact that Late PSl tolerated syllables of the type palatal + rounded back vowel (as in **dušǫ, *mǫžu*) causes considerable difficulty in interpretation. We know that at an earlier time syllables like *čū, šū, žū* or *n'ŭ* would have fronted to

či, ši, ži, n'ĭ > *n'ь* according to the demands of synharmonism. Similarly we would expect forms like **dušǫ* to give **dušę*. It has, therefore, been suggested that we are dealing here not with rounded back vowels but with rounded front vowels as in French (*u, eu*) or Grm (*ü, ö*). Thus, forms like **dušǫ* or **mǫžu* are sometimes transcribed as **dušǫ̈* and **mǫžü*.

It is interesting to note that there is no clear evidence for *'ǫ* (or *ǫ̈*) ever having existed within a root but only at morpheme boundaries where its presence may be explained as analogical in origin. That is, *ǫ* after palatals in forms like **prošǫ, *pišǫtь, *znajǫšti* or **dušǫ* are modeled after **nesǫ, *vedǫtь, *gryzǫšti* or **rękǫ* where a hard consonant + back vowel is perfectly normal in PSl. However, the instrumental singular *-ojǫ, -ьjǫ* is hardly explainable in analogical terms. On the other hand, *'u* (or *ü*) < *eu* regularly occurs in roots, **leud-* > **l'ud, *teudj* > **t'ud'-*.

To summarize, when we speak of a general palatalization before front vowels in Late PSl, we must keep in mind the following facts. We cannot have in mind the velars (Group 1), for they cannot be followed by front vowels, nor do we have in mind Groups No. 2 and 3 for they are "soft" already. We are speaking exclusively of the phonemes listed in Group No. 4 when followed by *i* (of all origins), *ь, e, ę, ě* (both $ě_1$ and $ě_2$ or $ě_3$ in the north).

At this time in the history of PSl, consonants in the environment just defined began to undergo palatalization. The process seems to have taken place everywhere in the Slavic speaking world except in the extreme southwestern corner. That is, it failed to develop in the Sln, SC, M and W Blg regions. In these languages, therefore, we can expect to find only those palatalized consonants which already existed in Late PSl, and even this meagre stock of palatalized segments has been largely curtailed.

For the remaining areas of Slavic where an overall palatalization of consonants did in fact take place, it is necessary to distinguish two basically contradictory tendencies. There is the conservative tendency concentrated in the northeastern corner of the region (R, Br, P) where with some few exceptions the number of palatalized consonants remained as inherited from Late PSl. In the rest of the palatalizing area, there arose a general tendency to curtail the instances of palatalization. This tendency, which assumes very different proportions in the various areas affected by it, manifests itself in three main ways. These may appear in the form of:

1. restrictions on the number of front vowels which bring about palatalization. In Ukr the reflexes of PSl *i, e* and strong *ь* either lost or failed to develop the power to palatalize; in Cz *e* and *ь* lost this power but not *i*. This type of information is summarized in Table II.

2. restrictions on the type of consonants which can be subject to palatalization. In Slk, for example, only *t, d, n, l* can undergo palatalization; in Ukr labials are no longer subject to it or in Br every *r'* > *r*. See Table III.

3. restrictions on the position in which palatalized consonants can occur. For example, Blg permits no palatalized consonants in syllable final position. A similar restriction applies in P and Br but only as regards the labials. See Table III.

That is to say, when dealing with the development of the hard vs soft relationship of consonants in a given Slavic languages, we are interested in answering mainly four questions:

(1) Which PSl front vowels or their later reflexes bring about the palatalization of a preceding consonant?
(2) Which consonants are still subject to this palatalization?
(3) Are there any environmental restrictions on those consonants subject to palatalization?
(4) In what way do the PSl consonants of group No. 2 and 3 (Table I) — those already soft fit into the new system of hard vs soft relationships?

The answer to all those questions will be outlined below in Tables II, III and IV.

TABLE II

THE PALATALIZING VOWELS OF LATE PROTO-SLAVIC

The PSl front vowels: *i, e, ě, ę, ь*

1. All palatalize: R, Br, P, Slk, UL, LL
2. Only some palatalize:
   — Ukr: only *ě, ę* and weak *ь*
   — Cz: only *i, ě,* and *ę* (sometimes)
   — Blg: only stressed *ě*
3. None palatalize: Sln, SC, M, W Blg

Stating that any given PSl vowel produces palatalization in a modern language means simply that the effects of an earlier palatalization are still evident to this day but without reference to any possible change in the vowel itself.

If as the result of palatalization further changes occur, this is indicated as in P *d' > dz'* or Cz *r' > ř.*

There is no need to include Sln, SC or M, for those areas never experienced (or quickly lost) the palatalizing effect of front vowels (Table II, No. 3).

If this information is used in combination with that given in Table III, it is reasonably possible to predict which consonants in a given form will be palatalized in any one of the modern languages. Let us take, for example, the form **desętь* containing three front vowels and trace its development in several modern languages. First use the information from Table II and then from Table III.

Firstly, we discover that in the dialects from which R arose, *e, ę* and *ь* palatalized a preceding consonant, thus, **desętь > *d'es'ęt'ь*. Table III informs us that palatalized *d, s,* and *t* all continued into modern R. We can then fully ex-

TABLE III

THE CONSONANTS STILL PALATALIZED IN MODERN LANGUAGES

PSl	*R*	*Ukr*	*Br*	*P*	*UL*	*LL*	*Slk*	*Cz*	*Blg*
v'	+	–	0	0	0	0	–	–	0
p'	+	–	0	0	0	0	–	–	0
b'	+	–	0	0	0	0	–	–	0
m'	+	–	0	0	0	0	–	–	0
d'	+	+	dź	dź	dź	ź	+	+	0
t'	+	+	c'	ć	ć	ś	+	+	0
s'	+	+	+	+	–	–	–	–	0
z'	+	+	+	+	–	–	–	–	0
n'	+	+	+	+	+	+	+	+	0
l'	+	+	+	+	+	+	+	–	0
r'	+	0	–	rz	0	+	–	ř	0

+: still present in all environments
–: absent or phonologically irrelevant
0: restricted presence — only before vowels

pect that in modern R all three consonants will still be soft. Checking the same information for P and Br will produce the same conclusion as for R. In addition, for the latter two we would expect to find not simply *d'* and *t'* but *dz'* and *c'*. These deductions prove perfectly accurate when checked with the standard language, thus, P *dziesięć*, R *[d'es'at']*, Br *[dz'es'ac']*. Following the same steps for Ukr would tell us that *e* here does not palatalize, therefore, we have *des'at'* with hard *d*.

Now, if we turn to the information on Slk, we again find that *e, ę* and *ъ* were all palatalizing vowels as in R, P, and Br, therefore, **desętъ* > **d'es'ęt'ъ*. Then we discover that *s* can no longer be palatalized in Slk. Thus, we now have *d'esat'* (spelled *desat'* since palatalization is not marked before *e*). Cz, on the other hand, can also have palatalized *d* and *t* but not before the reflexes of *e* or *ъ*. Therefore, the Cz form will have both hard *d* and *t*. The reflexes of *ę* in Cz sometimes palatalize and sometimes not under conditions which are well known. The question is, nevertheless, of no importance here because again, as in Slk, *s* in Cz can never be soft. Therefore, in the Cz *deset* all consonants are hard.

Both Tables, however, are only orientational and cannot be used with complete accuracy to predict the absence or presence of a palatalized consonant in any of the languages. Such problems belong to the history of each individual language. The greatest difficulties arise in those instances where the loss of a weak jer creates a new cluster of consonants. In these new circumstances one or more members of the cluster often undergo dispalatalization.

TABLE IV

THE PROTO-SLAVIC PALATAL AND PALATALIZED PHONEMES

NOTE: Here belong all those segments defined in Table I, Nos. 2, 3. The reflexes of *dj* and *tj* will be presented separately at the bottom of this Table. *m'* < *mj* stands for any jotated labial.

PSl	*č*	*š*	*ž*	*r'*	*l'*	*n'*	*c*	*s'*	*z'*	*m'*
R	+	−	−	+	+	+	−	+	+	ml'
Br	−	−	−	−	+	+	−	+	+	ml'
Ukr	−	−	−	±	±	±	±	±	±	ml'
P	−	−	−	rz	+	+	−	□	□	m'
Cz	+	+	+	ř	−	+	−	□	−	mj
Slk	+	+	+	−	+	+	−	□	−	−
UL	+	+	+	±	+	+	−	□	−	+
LL	c	−	−	+	+	+	−	□	−	+
Sln	+	+	+	rj	lj	nj	−	−	−	ml'
SC	+	+	+	−	+	+	−	−	−	ml'
M	+	+	+	−	−	+	−	−	−	mj
Blg	+	+	+	±	±	±	±	±	±	±

+: still present in all environments
−: former palatalization is entirely lost
±: former palatalization is partially lost
□: segment never existed in the specified area

Reflexes of *dj* and *tj* — palatalized vs dispalatalized:
dj > SC *đ*, M *ǵ*, Sln *j* vs E Sl *ž*, P, Slk *dz*, Cz, UL, LL *z*, Blg *žd*.
tj > R, Sln *č*, SC *ć*, M *ḱ* vs W Sl *c*, Ukr, Br *č*, Blg *št*.

West Sl possessed no *s'* only *š* < *x* (by 2nd and 3rd palatalization). This *š* develops as does *š* of other origins. Proto-Polish never possessed *z'*, only *dz'* < *g* (by 2nd and 3rd palatalization) which dispalatalizes like *dz* < *dj*.

The information cited above is very often irrelevant just as it was in PSl, for segments such as *č, š, ž, c,* etc. were soft in all environments and, therefore, this fact played no distinctive role in the phonology of PSl; it was merely a phonetic detail reflecting their origins. The same considerations for the most part still hold true in the modern languages. For example, R *č* is said to be soft but there is no such thing as a hard *č* with which it could contrast as in *brat* vs *brat'*.

On the other hand, some members of this group do play a distinctive role in the phonological systems of the various modern languages. Table IV only outlines whether or not the original palatal or palatalized phonemes retain this quality. It does not indicate whether this loss or retension is of any relevance in the phonological systems of any of the languages now. This question can be answered only in connection with a detailed study of the phonological structure of each language, and this is beyond the scope of this work.

Nevertheless, a few examples will be helpful. In R as we see from Table IV, the PSl *c* hardened without exception and also in P, UL and Br. In R, however, this fact is irrelevant to the system because there exists no *c'* to contrast with the new hard *c*. In P, UL and Br, on the other hand, a new *c'* has come into existence (< *t'*). Therefore, the dispalatalization of PSl *c* is relevant for these languages. Similarly, it will also be noticed that of all the Slavic languages, only Ukr and Blg retain some instances of palatalization in *c*. Had this palatalization been retained throughout, it would be nothing more than an interesting archaism. This, however, is not the case, for only in certain environments (different in the two languages) did *c* dispalatalized. Therefore, both languages now possess *c'* as well as *c*.

It must be emphasized that Tables II, III and IV attempt to summarize the situation as it exists in each language at the present time. This means that we must ignore many important historical details. For example, Table II indicates that the reflexes of PSl *e* and *ъ* do not palatalize a preceding consonant in modern Cz, but this does not necessarily mean that PSl *e* or *ъ* were never palatalizing vowels in this region. Quite the contrary, all the historical and dialectal data from Cz lead us to the conclusion that Cz like R underwent an overall palatalization of all consonants by all front vowels. However, Cz is characterized by the already mentioned tendency to curtail this feature. Similarly if Table III shows that modern UL, Cz and Slk possess no *s'* or *z'*, this does not necessarily mean that such segments never existed in these areas. The evidence indicates that they definitely did; the point is that they do not exist in the modern literary variants of these languages.

The same also applies to Ukr where the situation is somewhat more complicated. Unlike the situation in Cz, there is considerable (but not conclusive) evidence to indicate that PSl *e, i,* and strong *ъ* were never palatalizing vowels in Proto-Ukrainian. This would be quite an unexpected phenomenon in this area of Slavic since the Proto-Ukr dialects were surrounded by dialects undergoing an overall palatalization of consonants by all front vowels. This includes not only P, Br, Slk but also E Blg with which Ukr could quite possibly have been in contact before the Latin speaking population of that region consolidated into a block of Rumanian speakers, dividing Ukr from Blg.

Since Tables II and III are summaries, not only must we ignore interesting historical data but also some contemporary details. For example, Table III shows that neither Cz nor Ukr possesses palatalized labials. Again, this simply means that palatalized labials are not distinctively present in the modern languages. They are allophonically present in Ukr, and in both Cz and Ukr there is evidence indicating the former palatalized status of labials before front vowels. For example, PSl **pętь* > Cz *pět [pjet]* and Ukr *pjat'*. In both languages the sequence *p* + *j* developed from *p'*. That is, **pętь* > **p'ęt'ь* > **p'ät'* or **p'at'*, however, all of these details cannot be indicated in chart form. The Cz form is interesting for another reason. Had the *t* never been palatalized, *ę* would not have developed to *'e* (later to *je*) but to *a* as in *tahati* < **tęgati*.

The development of the jers. The term "jers", as stated elsewhere, refers to the two Late PSl vowels which arose from Proto-European *ĭ, ŭ* and are indicated by use of the symbols *ъ* (the front jer) < *ĭ,* and *ь* (the back jer) < *ŭ.* At some point shortly after their coming into existence, *ъ* and *ь* developed two basic allophonic variants known as strong and weak jers.

A jer (either *ъ* or *ь*) is said to be weak or in weak position if:

— it is the final vowel in any word

— it is followed in the next syllable by another vowel including a strong jer.

On the other hand, a jer vowel is strong or in strong position if:

— it is in a syllable followed by a weak jer

— it is the only vowel in a word and must be the bearer of stress, that is, a stressed monosyllabic. Weak and strong jers are distinguished by means of a subscript, thus, weak jer = *ъ̯, ь̯*; strong jer = *ъ̧, ь̧*. This information can now be illustrated with examples containing both strong and weak jers.

**tь̯ sь̯nь̯, *kъ̯nižь̯kъ̯, *kostь̯jь̯, *šь̯vь̯cь̯, *šь̯vь̯ca, *nadь̯ mь̯nojǫ*

There exists, fortunately, a much more serviceable rule of thumb known as *Havlik's law* for determining strong or weak jers. All that is necessary is to count from the right, that is, the end of the word; the first jer encountered will be weak, the second strong, the third weak, the fourth strong again and so on. If any other vowel is encountered, then one restarts the count so that the first jer to the right of this vowel will be weak.

The significance of the division into strong and weak jers is that they have very different developments. Weak jers are lost, that is, simply disappear whereas strong jers are retained as full-fledged vowels. These two processes are known respectively as the fall and the vocalization of the jers. The use of this latter term is often confusing since the jers in both strong and weak position always were vowels. Therefore, when we speak of the vocalization of strong jers, this does not mean that they become something which they had not been before. Rather it refers to the fact that strong jers were confirmed in their role as vowels instead of being eliminated from the system as were the jers in weak position. It is because of this tendency to disappear in certain environments that the jers are also referred to as reduced, ultra-short, indefinite, voiceless or half-vowels.

There are several factors connected with the fall or vocalization of jers which deepened the dialectal differences in PSl. These are the following:

1. The environments determining whether a jer is strong or weak as stated above are correct and accurate in the vast majority of cases. In spite of this, there are numerous instances where we have: (a) retension, that is, vocalization of weak jers (especially in S Sl and Polabian) and (b) loss of strong jers (especially marked in N P, Kashubian, Slovincian and the Lusatian area).

2. The vowel which emerges from a strong jer differs widely from area to area. Both the back and front jer exhibits a great variety of reflexes, thus, *ъ* > *o, e, a, ə; ь* > *e, 'e, a, ə*. The nature, therefore, of the vowel or vowels developing from the strong jers is one of the major points on which the Slavic languages diverge. As can be seen, some of the major considerations regarding the reflexes of the jers are: (a) does *ъ* remain a rounded vowel or not? (b) does *ъ* remain a back vowel or not? (c) does *ь* remain a front vowel or not? (d) does *ь* palatalize a preceding consonant? (e) do *ъ, ь* merge or give separate reflexes?

3. In certain environments the jers may have special development, that is, different from the normally expected reflexes of jers. The more important ones are: (a) the reflexes of *tъrt*-formula forms (discussed on pp. 151-6); (b) the reflexes of *trъt*-formula forms (pp. 152-6); (c) the reflexes of *jь*, especially in initial position; (d) the reflexes of *ъ, ь* + *j*. In this position the jers are referred to as tense and are sometimes marked with a special diacritic, thus, *ъ̂j, ь̂j*. The tense jers may be either strong or weak. The weak tense jers are lost usually as are all weak jers but the strong ones develop not in the usual way but as *y* and *i*, that is, *ъ̂* > *yj, ь̂j* > *ij*. (See pp. 167-72.)

As can readily be seen even from the few examples cited above, the fall of the jers gave Slavic speech the form and structure which we now recognize in the modern languages. What's more, the fall of the jers marked the end of an age-old process, the tendency to tolerate only open syllables. It thus set the various Slavic dialects on entirely new and different paths of development. This becomes very evident even on the basis of a short list of phenomena resulting from the fall of the jers. Examples are taken from R unless specified otherwise.

1. Since jers in word final position were in the vast majority of cases weak, their loss made possible the existence of final consonants: **domъ* > *dom, *sǫnъ* > *son, *rǫtъ* > *rot, *nožь* > *nož, *morozъ* > *moroz, *solь* > *sol', *dьnь* > *den'*. Note the palatalizing effect of *ь* before its loss in the last two examples.

2. All manner of consonant clusters are now possible: **pьčela* > *pčela, *pьšenica* > *pšenica, *rǫčьka* > *ručka, *xolodьnъjь* > *xolodnyj*.

3. The fall and vocalization of the jers brought about the so-called fleeting or mobile vowel. Notice also the new clusters: **sǫnъ* > *son* (nom. sing.) vs **sǫna* > *sna* (gen. sing.); **kъnižьkъ* > *knižek* (gen. plural) vs **kъnižьka* > *knižka* (nom. sing.); **xolodьnъ* > *xoloden* (masc. sing.) vs **xolodьna* > *xolodna* (fem. sing.); **molotъkъ* > *molotok* (nom. sing.) vs **molotъka* > *molotka* (gen. sing.).

4. Diphthongs came into existence once again: **krajь* > *kraj, *mojь* > *moj, *vojьna* > *vojna*. Even a broader range of diphthongs was possible in those regions of Slavic where *v* remained (or became) a bilabial glide (as in Ukr or Slk) instead of a labiodental fricative (R, P, etc.): **pravьda* > *pravda [praųda]* (Ukr, Slk, Br).

5. The fall of the jers also brought about compensatory lengthening in certain areas of Slavic.

6. The existence of final consonants and clusters made possible or even necessary such processes as:

(a) the loss of voicing in final consonants: **vozъ > voz [vos]; *rodъ > rod [rot]; *nožь > nož [nož].*
(b) assimilation in voicing: **kъnižьka > knižka [kniška]; *prosьba > pros'ba [proz'ba]*
(c) assimilation in palatalization: **sъlězti > slezt' [s'l'es't']*
(d) assimilation in point of articulation: **sъčęstьje > sčast'je [ščas't'je]*

The problem of the tense jers and their reflexes: The so-called tense jers, usually symbolized with *ŏ* or *ĕ*, are best defined as any strong *ъ* or *ь* + *j* in which environment *ъ* merges with *y* and *ь* with *i*. Only in R do *ŏ, ĕ* develop as normal strong jers, for example, **suxŏjь* > Ukr *suxyj* but R *suxoj*;[21] **čĕjь* > Ukr *čij* > *čyj* but R *čej*. Some textbooks expand the definition to include also *jь*, and still others include the sequences *i* or *y* + *j* and *ji*. That is to say, the development of the tense jers is often presented in such a way as if there were a merge of *ьj* with *ij*, *ъj* with *yj* and *jь* with *ji; i* and *y* in these environments are referred to as "reduced" and marked *ĭ, ў*. It is then argued that both *ў* and *ĭ* in weak position will be lost as are all weak jers and also vocalize in strong position. However, there are no examples of *ў* being lost in the so-called weak position, and the few examples of *ĭ* > *ø* are greatly outweighed by counterexamples.

One major reason for believing in this suggested merger is that the OCS documents do not distinguish between any of the above mentioned sequences. Thus, forms like **mojь* (nom. sing.) vs **moji* (nom. plural) are both spelled in the same way, that is, *mo* + one of the various *i*-symbols; both **sinьjь* and **siniji* can be spelled *sinii*, and **kostьjь* is spelled either *kostьi* or *kostii*. However, the OCS spellings in this regard are not as chaotic as is often stated. Although **sinŏjь* (nom. sing. masc.) may be written either *sinьi* or *sinii*, the opposite is not true. *siniji* (nom. plural masc.) is quite consistently written *sinii*. The same applies to *ĕ*. **dobrŏjь* may be spelled either *dobrъi* or *dobryi* whereas **dobryję* in the vast majority of cases is written *dobrye*.

There are only two categories in which the so-called *ĭ* is dropped, that is, treated as a weak jer. These are:

— the dative and locative singular of feminine adjectives (long form) and pronouns, for example, **toji > *toj, *jeji > *jej, *dobrěji > *dobrěj*.

— the imperative singular of verbs the stem of which ends in a vowel or *j* as in **pьji > *pьj, *stoji > *stoj*.

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[21] The R unstressed nominative singular masculine ending *-ый* in such adjectives as *старый* or *добрый* represents a purely Church Slavonic spelling. It is pronounced as *-əj* which is the normal development for *o* in poststressed position in standard literary R (based on S R dialects). N R dialects, which have no reduction or loss of labialization of *o* in unstressed position, have a clear *oj* in *staroj, dobroj*, etc.

Regarding the first category, our reconstruction of the proto-forms, based on comparative evidence, may be in error. The form, at least in Late PSl, may have been *tojь* where the loss of a final *ь* requires no explanation. The presence of *-i* in the imperative is much more firmly established, but the loss of unstressed *i* in this form is also well attested. For example, in Old E Sl documents we find *búdi* 'be' instead of modern R, Ukr *bud'*, Br *budz'*. The final *i,* however, still occurs in SC *bȕdi*, Sln *bọ́di*, Blg *bədi*, but in forms derived from **pьji* or the like the final *i* disappears (as if it were a weak jer) everywhere: SC, Sln *pȋj,* Blg *pij,* Ukr *pyj,* R *pej*. Note, however, the expected reflexes of strong *ĵ* in all examples. As counterexamples to these imperative forms, we have many instances where final *jь* and *ji* have entirely separate developments: **mojь krajь* (nom. sing.) vs **moji kraji* (nom. plural) — weak *ь* drops; *i* is retained. We see a similar pattern if we compare examples of the type **žitьje* with those like **sinijě*. We discover that the sequences *ьj* and *ij* develop differently and this would not be possible if they had merged. The *ь* of **žitьje* being in weak position is consistently lost,[22] but *i* in *ij* is retained not only in R and Br but also in N Ukr dialects and is well attested in older documents for the entire region.

The contention that *ьj* and *yj* may have merged is often buttressed by R examples such as **myjǫ* > *moju* 'I wash' compared with **suxъjь* > *suxoj*. There are, however, only five verbs like *myt' - moju* whereas there are infinitely more adjectival endings like *slepyje* < **slěpyjě* (masc. acc. plural) where *y* is not influenced in any way by the following *j*. If in fact such a thing as *ỹ* had existed here and if *ỹ* develops as *ъ,* then it would either drop or *ỹjě* > *oje* but no such forms are attested anywhere. For verbs like *myt' - moju* it is better to assume that R introduced here an alternation similar to that encountered in *pit' - p'ju* < **piti - *pьjǫ* with a full vowel in the infinitive and a reduced vowel in the present. That would be **myti - *mъjǫ*. That **mъjǫ, *mъješi* are not mere theoretical constructs — is supported by Old R examples like *mjutsja*< **mъjutsja*. Therefore, forms like *moju* < **mъjǫ* require a different explanation; it would be an example of a weak jer developing as a strong one — a much more common phenomenon. Regarding *ô, ê* in W Sl, see pp. 232, 239, 248-9, 254-5; in S Sl, pp. 307-8, 327.

A strong bit of evidence for the merger of *i* with *ь* adjacent to *j* is presumably provided by the forms having *jь* or *ji* in initial position. Without reference to other Indo-European languages, it is virtually impossible to distinguish which PSl forms would have begun with *ji* and which with *jь*. This merger, however, came about rather late in the history of PSl and is connected with the development of prothetic elements in PSl. As explained, all initial front vowels would have received a *j* onglide. When PSl changed its syllabic structure by weakening and later dropping the weak jer, the prothetic element could also be dropped, especially in those situa-

[22] R spelling like *взятие, пение* with *ije* < *ьje* does not reflect a truly R development but rather traditional Church Slavonic orthography; *житье, сиденье*, etc. are native R. The expected reflex is exemplified by such forms as *kost'ju* <**kostьjǫ* (*i*-stem, instr. sing.).

tions where the prothetic consonant and the vowel following it were of the same configuration. This applied to *j* + *i* and also to *j* + *ъ* particularly since *ъ* in this environment was very likely phonetically closer to *i*, only shorter. (See p. 104.) Where *j* was not dropped, that is, where *jъ-* > *ъ*, *ъ* merged with *i* in the Central Cz and UL regions, the distinction of *ji* vs *jъ* was maintained.

Although reliable examples are few, a general pattern emerges whereby *ji* remains unchanged and *jъ* develops depending on whether *ъ* is strong or weak. For example, **jinъjъ* > Cz *jiný*, Old UL *jiny* but **jъgъla* > Cz *jehla*, and UL *johła* and *jehła*, **jъmę* > Old Cz *jmě* (now *jméno*) and UL *mje, mjeno.* As we see, *ъ* vocalizes in strong position but is dropped when weak. The rather late documentation for UL provides us with only very meagre evidence for an immediate stage with initial *j*. That is to say, we cannot be certain whether **jъmę* developed directly to *mje* or whether there existed a form like **jm'e* at some earlier period.[23] On the other hand, Cz documentation provides several examples such as **jъgra* > Old Cz *jhra* but now *hra*; **jъměti* > Old Cz *jmieti* but now *míti.* UL now has simply *hra, měć, mje,* etc. without any trace of an initial *j*. Elsewhere in Slavic both initial *ji* and *jъ* merge giving *i*.

In Br, Ukr, P, Slk, and LL we find many forms in which this initial *i* has disappeared. For example, **jъgrati* > Ukr *hraty*, Br ɣ*rać*, P *grać*, Slk *hrat'* and LL *graś*. It is often assumed that this phenomenon has something to do with the loss of weak *ъ* and that this entire area of Slavic underwent a change similar to that found in Cz, namely, **jъgrati* > **jgrati* (or **jhrati*) with later loss of initial *j*. This explanation, however, must be rejected for the following reasons:

1. Weak jers were lost in all of Slavic; the lost of initial *i* is limited to certain specific areas.

2. The loss of initial *i* occurred at various times in the regions mentioned but always later than the loss of the jers.

3. The loss of *i* is not a regular process and does not follow the same rules as in the loss of a weak jer. For example, in **jъgъla* 'needle' *ъ* is in strong position; therefore, it should presumably be retained but in the diminutive **jъgъlъka* it should be lost. This seems to be confirmed by the Ukr *ihla*[24] (dial.) vs *holka* (literary) but P has *i-* in both *igła* and *igiełka.* Br has both ɣ*olka* and *i*ɣ*olka* whereas LL has *gła.*

4. The loss of *i* affects not only *i* connected with *ъ* but also *i* of other

[23] For example, UL *stwa* 'room' has initial *j* when preceded by a preposition ending in a vowel, thus, *do jstwy* or *we jstwě*. This noun is obviously connected with Cz *jizba*, P *izba*, R *izba* etc., but we cannot establish the proto-form with any degree of accuracy. Was it **jistъba, *jъstъba* or something else? In any event, this example is unique, for we have only *do hry, do mjena* (not **do jhrý* etc.). The root *hrać* < **jъgrati* has *j-* in some prefixed forms as *zejhrać* 'frolick' and *přěhrać* 'to lose' with *ě* presumably from *pre* + *j* but not with other prefixes, thus, *dohrać, zahrać, wuhrać.*

[24] It is also unexplained why *jъ* in strong position would give *i* instead of *je.*

origins. For example, the Ukr personal name *Hnat* derives from Gr *Ignatios* which obviously never contained any *ъ*.

It therefore becomes obvious that the loss of *i-* is not to be connected with the loss of the jers but is a separate and later process of limited scope. As we have attempted to demonstrate above, *ji-* and *jъ-* had merged to *i* in those areas where prothetic *j* was dropped. This took place before the final loss of weak jers; therefore, forms like **jъgъla* or **jъměti* had already become **igъla, *iměti*, and the initial *i-* was not affected by the loss of the jers. The loss of *i-* occurs in these areas where the distinction between the PSl prepositions **jъz* and **sъ* is either lost or at least confused. This is more readily understood if we consider the following: the PSl preposition **sъ* + **tobojǫ, *mьnojǫ, *dymъmь* will give three different results once *ъ* drops — *s* in the first example, *se* or *so* (where *ъ* was strong) in the second, and *z* in the third. Similarly **jъz* + **tebe, *domu* will give *is* in the first instance but *iz* in the second. Since the sense of the phrase is conveyed by the case, not by the preposition itself, it is easy to see how these two prepositions could merge. For example, the P *z wody* vs *z wodą* are as distinct from one another as are R *iz vody* vs *s vodoj*.[25] Wherever this merger occurred, initial *i* came to be regarded as an optional vowel and was often dropped. An additional factor is the dropping of *i-* in the verb *iměti* < **jъměti* 'to have' when preceded by the negative *ne*, but this can also occur in areas where **jъz* and **sъ* did not merge.

It is the optional nature of an initial *i* that explains the great variety of competing forms in all areas where this phenomenon is known. As the literary norms of each of these languages became more firmly established, one of the variants (with or without *i-*) became the accepted or dominant form in the literary language whereas the other variant was relegated to dialectal or archaic (poetic) usage. For example, in both literary Ukr and literary P the word for 'spark' appears with initial *i-* (*iskra*) but the *i*-less variant is well attested in the dialects and older phases of the language. On the other hand, in both languages the *i*-less variant of the verb 'to play' is the literary norm; thus, **jъgrati* > **igrati* > Ukr *hraty*, P *grać*. However, P still uses *igrać* in certain set expressions and *ihraty* still occurs in Ukr dialects, but both languages have *i*-forms preserved in the nouns: P *igraszka*, Ukr *ihraška* 'plaything'; P *igrzysko*, Ukr *ihryšče* and *hryšče* 'playground'. Ukr uses both *ihra* and *hra* 'game' whereas literary P generally uses *gra* with *igra* as an archaism.[26] P also has *igrzec* 'player' in the sense 'wandering minstrel'. Such examples can be cited many times over with all roots having *i-* < *jъ-* or *ji-*.

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[25] Slovak makes a formal distinction in that *s, so* is followed by the instrumental, *z, zo* by the genitive: *s diet'atom* vs *z detstva*. Cz maintains a similar distinction but *s, se* can be followed by the genitive when it means 'off, from the surface of' but not as in R *с ympa, с москu* etc. Note that, in most instances, voicing assimilation renders this distinction — a purely orthographic one.

[26] Purely as a matter of standardization, literary Ukr uses *hra* in the singular but *ihry* in the plural but this is a recent development. Sometimes the competing forms acquire different meanings. P *ikra* 'fish eggs' vs *kra* 'floating ice' < **jikra* 'block, lump'.

As explained above, the merger of *jь-* and *ji-* occurred everywhere except where prothetic *j* was retained before these two vowels, that is, in Cz and UL. But these two areas belong to the same group of dialects that lost the distinction between **sъ* and **jьz*. This would mean that at the time when weak jers were lost, *jьz* had not developed to *iz* as elsewhere in Slavic but to *jz* (an unattested but very probable form). Therefore, in Cz and UL it is only initial *j* + consonant that can be interpreted as optional after *jz* and *s* merged, whereas *ji-* (as in *jíti* < **jeįteį*) or *je-* (as in *jehla* < **jьgъla*) remain quite stable. In UL initial *j* + front vowel is often replaced by *h* by a process of dissimilation, but this is a later development. For example, **jinъjь* > Cz *jiný* > Old UL *jiny* > later *hiny* (now *hinaki*).

The so-called *ŝ* is also said to have existed in internal position in such forms as **vojьnъ* (gen. plural of **vojьna*), **dostojьnъ, *tajьnьstvo, *jajьcь* (gen. plural of **jajьce*). In the vast majority of such examples, *ь* after *j* develops as does strong *ь* in any other environment. Thus, **dostojьnъ* > SC *dòstōjan* where *a* < *ę* is the regular reflex vs Sln *dostójen* where *e* < *ę* is normal. Only in R and occasionally in Blg are there instances of *jŝ* > *i* as in *jaic, dostoin, tainstvo* and Blg *tainstven* (but also *tajnstvo*) but such examples are numerically trivial when compared with these having *jь* > *e* or *je,* the normal reflex for *ę*. For example, as opposed to R *dostoin, jaic, tainstvo* there are *tajen* < **tajьnъ, vojenno* < **vojьnьno, bojec* < **bojьcь* and many more. Most examples of *i* < *jь* are based on Church Slavonic orthography or have some other explanation. For example, in R *gostepriímnyj* vs *prijóm* both contain the root **jьm* 'take, grasp'. In initial position **jьm-* > **im-* (because of the development of prothetics, pp. 104, 168-9) but prefixed **prijьmъ* > **prijem* and later *prijom.*[27] The *i* in *im* derives from the nonprefix forms. In the same way arose *zaímstvovat'* vs *zajom, najom.*

Considerable attention has been devoted to the development of jers in Late PSl because of the unparalleled significance of these processes in the linguistic history of Late PSl. The fall of the jers brought about not only the end of the open-syllable structure which for centuries had been the dominant feature of Slavic speech, but it was also the last process to affect all speakers. No subsequent linguistic change encompassed all regions of Slavic, which means that PSl ceased to function as a single linguistic entity simultaneously with the loss of jers or shortly thereafter. Hence, the traditional view found in many reference works that the fall of the jers and the emergence of a closed-syllable type of language signaled the end of PSl and, thus, the beginning of the modern period.

Dating this process has, therefore, always been of great interest for Slavicists. Fortunately, we have the testimony of the OCS documents from which it is clearly evident that the fall of the jers in the Bulgarian—Macedonian area had already occurred or was well advanced by the eleventh century. This means that the process had begun some time in the tenth century. On the other hand, eleventh century

[27] Modern R no longer uses the verbs *jati, imu* < **jęti, jьmǫ* without prefixes as in *vz'at'* < **vъz + ęti* or *prin'at'* < **pri + n + ęti.*

documentation[28] from the Ukraine shows the jer-symbol used with almost complete accuracy. Confusion in their use becomes apparent only some fifty to seventy years later (beginning ca 1140). In NE Sl, that is, the Novgorod region, the jers are not lost until the early or mid thirteenth century. Thus, from the areas providing sufficient documentary evidence, we may trace a process lasting approximately two and half or perhaps three centuries starting in the south or southwestern corner of Slavic and spreading gradually to the north and east. From other areas of Slavic, the documentation is very meagre; nevertheless, what there is — indicates the loss of jers had occurred in the Slovene and Czech regions by the eleventh century and in P by the early twelfth.[29]

The labialization of *e*. In a large area of the northeast which includes all of E Sl, P and the Lusatian region, that is, all of northern Slavic minus its western fringe (Cz, Slk, and the most westerly regions of Lekhitic are excluded), PSl *e* > *o*. However, the conditions under which *e* > *o* differ very markedly from place to place, the details of which will be dealt with in the Chapter IX where the sound changes of each language are outlined. Here we will limit ourselves to a mere statement of the problem by outlining the basic difficulties and complications.

THE *e* > *o* PROCESS IN EAST SLAVIC

In this area there are three basic phases in *e* > *o*.

1. *je-* > *jo-* > *o-* in all regions of E Sl but this is not an unconditioned sound change. It occurred only where a front vowel except *ь* followed in the next syllable: **jezero* > *ozero* but **jego* > W Ukr *jeho*, Br *jeγo* > *jaγo*, R *jego* (dial.) or *jevo* (literary). The modern Ukr *joho* is more recent and of morphological origin. As will be discussed below *e* > *o* is dependent upon stress in some areas of E Sl. However, even in these areas *je* > *o* in initial position occurs regardless of stress, thus, not only in **jezero* > *ozero* where the *e* was stressed but also in **jesetrъ* > R *os'otr*, Ukr *oseter*, or **jedinъ* > R *odin*, Ukr *odyn* where *e* was never stressed.

It is generally accepted that *je-* first developed to *jo-* and then *j* was dropped as part of the same process that also eliminated *j* in the sequence *ju-*, that is, *j* in initial position was dropped when followed by a rounded vowel. The processes definitely seem to be connected, but *ju-* > *u-* is an unconditioned sound change whereas *je-* > *o* is conditioned.

2. *e* > *o* after *č, š, ž, j* if followed in the next syllable by a nonpalatal(ized) consonant or by a nonfront vowel: **želǫdь* > Ukr *žolud'* vs **čel'adь* or **čerevo* without change because of *l'* < *lj* or the front vowel in the next syllable. This

[28] The earliest example is the *Ostromir Gospel*, 1056-7.

[29] The Sln data are gleamed from the *Freising Fragments*, early eleventh cent.; the Cz data from placenames recorded in Grm and / or Lat documents; the P data — from the *Bull of Gniezno*, 1135.

change is also attested in all regions of E Sl. Remember, at this time *č, š, ž* (and *j* by its articulatory nature) were strongly palatalized.

3. *e* > *o* after any palatalized consonant under the same conditions as stated in No. 2. This phase of *e* > *o* is limited to R and NE Br but does not occur in Ukr and only sporadically in SW Br. This is connected with the Ukr feature that PSl *e* either loses or fails to develop its power to palatalize a preceding consonant. Nowhere do we find *e* > *o* unless *e* palatalized the preceding consonant: **medъ* > **m'ed(ъ)* > Br, R *m'od* vs Ukr *med; *ledъ* > **l'ed(ъ)* > Br, R *l'od* vs W Ukr *led.* The literary Ukr forms such as *l'od-, s'omyj,* etc. which contradict the above formulation are relatively recent (mid XVII century) and not directly connected with *e* > *o* of Late PSl. The same applies to R forms like *d'oševo* (vs Ukr *deševo*) where *e* > *o* could arise only after *š* dispalatalized.

When discussing the above three phases of *e* > *o* two additional factors must always be taken into consideration. These are the following:

— The possibility of *e* > *o* in an open final syllable. For R and Br this environment is no impediment but for Ukr it is: **pletjé* > R *plečó* Br *pl'ačó* vs Ukr *plečé.*

— The possibility of *e* > *o* in a nonstressed syllable: For Ukr the evidence is clear — stress is not a factor: **čelo, *pьšenó* > *čoló, pšonó.* In standard literary R and Br the situation is also clear — *e* > *o* occurs only under stress: R *čeló* vs *čǫ́la, sestrá* vs *sóstry, žená* vs *žǫ́ny.* However, this is only half the answer; we know that due to the feature of *akan'e* and *jakan'e,* neither *o* nor *e,* of whatever origin, can appear except when stressed. Therefore, when we encounter the R *čeló, nesú [č + ló, n' + sú],* or Br *čaló, n'asú,* there is simply no way to determine what vowel (*e* or *o*) existed in the prestressed syllable before *akan'e* and *jakan'e* erased all mid vowels. All we have at our disposal are those dialects of R (in the north)[30] and Br (the southwest corner) where *akan'e* and *jakan'e* are unknown.

In SW Br *e* > *o* in unstressed position is relatively consistent after *č, š, ž, j* but only sporadically in other environment, that is, *čoló, žonáty* vs *seló.* This is hardly unexpected since, as mentioned, the same dialects tend not to be subject to phase 3 of *e* > *o* even in stressed position.

The data from the non-*akan'e* dialects of N R are well known and carefully studied but their historical interpretation is still debated. Within this area three situations are clearly delineated. These can be exemplified by using the first person singular form of the verb *nesti* as follows:

(a) *n'esú - n'osú* are in free variation. This takes in the central or central-western belt of the non-*akan'e* dialects. Within this area itself there is an

[30] All R dialects (north, south and central) have been systematically studied and for the most part mapped as far east as approximately the 45-48 meridian. This is perfectly sufficient in the historical sense, for it covers all the ancient dialectal divisions. Anything further to the east is merely the result of migrations from the heartland.

island (an oval centred around the city of Čagoda) where only *n'esu* is known or, at least, predominates.

(b) *n'osú* predominates, *n'esú* being extremely rare. This covers the south-eastern corner (about one-third) of the non-*akan'e* dialects.

(c) *n'esú* predominates, *n'osú* forms being extremely rare. This includes a small area west of the area described in (a) and much larger territory north of area (b) and east of (a). However, in the north and northeast of this territory we again encounter large patches with *n'esú - n'osú* in free variation.

Given this complicated configuration, it is small wonder that linguistic historians still have difficulty in reconstructing the original situation or situations. Nevertheless, the general consensus is that in the northern areas of E Sl the *e* > *o* change proceeded in two quite different ways. There are: (1) *e* > *o* occurs in all environments (phases 2 and 3 as defined above) without regard to the position of stress. This situation is directly continued in area (b) which was the heartland of the old Rostov-Suzdal' dialect. Here *e* > *o* is still consistently regular to a remarkably high degree.[31] (2) *e* > *o* may occur in any environment (phases 2 and 3) but only when stressed. This seems to have been the situation in the ancient dialects of Pskov (now in the *akan'e* region) and Novgorod, but here again there is some doubt whether *e* > *o* was consistent even in stressed position. As with certain other linguistic processes, it seems that *e* > *o* reached the Pskov and Novgorod regions[32] somewhat belatedly and was not fully carried through by not occurring in certain roots or by missing certain subdialects altogether. In unstressed position *e* > *o* wherever attested, it was morphologically and/or analogically conditioned. If this interpretation is correct, then the areas with *n'esu - n'osu* in free variation represent a blending of the Novgorod and Rostov-Suzdal' types of dialect.

Finally, it must be mentioned that certain regions of E Sl were or, at least, seem to have been totally untouched by the *e* > *o* process. Maps of R dialects (including all regions — northern, southern and central) are dotted by literally hundreds of enclaves where *e* > *o* is completely absent. Some of these enclaves may be the remnants of what were sizable islands in the past. Several such islands seem to

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[31] Such forms as *sm'otána, b'orú* < **smetana, *berǫ* prove that *e* > *o* in unstressed syllables cannot always be of analogical origin as could be argued with *n'osú* on the basis of *n'os* < **nesl̓ъ*. Further, the alternation *o* + C° vs *e* + C' as in *s'oló* vs *s'el'é* (loc.) is fairly consistently retained.

[32] Because Pskov and Novgorod seem to have shared the *e* > *o* feature, it should not be inferred that they formed one dialectal entity. There were many differences between them. Even the archeological evidence indicates different cultural affinities, and the early *Chronicles* record that they were settled by different tribal groupings — Slověne in Novgorod; Kriviči on Pskov. The Kriviči were also the dominate unit in the Polock and Smolensk regions and seem to have been the major source of settlers (along with other Slavic tribes) of the Rostov-Suzdal' region. All N R dialects are either direct descendants or mixtures of the dialects of Novgorod, Rostov-Suzdal' or Pskov.

have existed within the S R dialectal zone, but their number or size is impossible to reconstruct now. However, the area north and northwest of R'azan' seems particularly consistent in the retension of *e* before hard consonants as does the area between the headwaters of the Don and Oka (south of Tula, west of Orel). There is also considerable evidence indicating that certain western regions of Ukr were left unaffected by *e* > *o*. There is general agreement that this would have definitely included the area immediately contiguous to the Carpathians but may very well have extended further east to take in all the area now known as the SW dialects of Ukr. The situation in modern literary Ukr better reflects that of the northern dialects from where *e* > *o* forms also penetrated but irregularly so into the SW dialects at a later date.

In E Sl we also have the additional complication that not only does *e* labialize under all the various conditions described above but so does new *e* < *ь*. Note the following examples from R: **pьsъ* > *p'os*, **ovьsъ* > *ov'os*, **orьlъ* > *or'ol*, **kozьlъ* > *koz'ol*. In Ukr, of course, we have *pes*, *oves*, *orel* and *kozel* since *e* of any origin is not expected to labialize in these environments. However, after *č*, *š*, *ž*, *j* all of E Sl has *o* < *ь*. Thus, **grěšьkъ* > Ukr *hrišok*, R *grešok* but **kъnižьkъ* (gen. plural of **kъnižьka*) > Ukr *knyžok* vs R *knižek*. (R retains *e* < *ь* in this example because it is not stressed). *ь* > *o* also occurs when it is part of the *tьrt*-formula, but here there is an interesting restriction.

Labialization does not take place if *ьr* is followed by a velar or a labial. Note the contrasting developments in forms such as **čьrtъ*, **čьrnъjь* > Br, Ukr **čort*, Ukr *čornyj*, Br *čorny* as opposed to **čьrvonъjь*, **čьrpati* > Ukr *červonyj*, *čerpaty*, Br *čẹrpa'c*. The lack of labialization is explainable only in terms of the environment. Similarly, in R there is no labialization in *pervyj* < **pьrvъjь* or *verx* < **vьrxъ* but *'o* < *ь* is quite possible before *r* in *p'or* < **pьrlъ*. In the sequence *tьr* + velar or labial it seems that *r* acts as a palatalized segment in that it blocks *ь* > *o*. This is significant, for there are still many dialects both R and Ukr (Transcarpathia) in which we have *r'* originating from the sequence **tьr* + velar or labial as in *v'er'x* < **vьrxъ*, *cer'kov'* < **cьrkъvь*, *p'er'vyj*, etc., as oppose to hard *r* in *čornyj* < **čьrnъjь*. It is also interesting that *r* in this very same environment in P and both UL and LL usually develops as *r'*, not *r*. Thus, in P **vьrba* > *wierzba*, **vьrxъ* > *wierzch* vs **tvьrdъjь* > *twardy* or **tvьrditi* > *twierdzić*.

THE *e* > *o* PROCESS IN LEKHITIC. The *e* > *o* process is attested in all P dialects including both Kashubian and Slovincian but is unattested in the Polabian documents and in the onomastic material from the Pomeranian dialects.

From the remaining Lekhitic area where *e* > *o* is known, the following facts emerge:

1. *e* > *o* occurs if *e* palatalizes the preceding consonant but not if *e* is followed by a palatal (any segment arising as a result of *jotation*) or by a front vowel in the next syllable. This feature, of course, is common to every area of

Slavic where *e* > *o* is known. Therefore, in forms like P *na brzozie* < **br'ez'ě* or R *na ber'oz'e* < **b'er'ezě* we are dealing with later analogical leveling based on those case forms where the ending consisted of a nonfront vowel as in the nominative: **br'eza* > **br'oza* > P *brzoza*; **b'er'eza* > R *ber'oza*. Polish, nevertheless, retains many instances of the original situation: **čelo* vs **na čelě* > *czoło, na czele; *kostelъ* vs **vъ kostelě* > *kościół, w kościele; *Petrъ* vs **Petre* (voc.) > *Piotr, Pietrze; *žena* vs **ženiti sę* > *żona, żenić się*; but *żonie* (dat.) < **ženě* where **żenie* would be expected.

2. *e* > *o* does not occur in final open syllables: **pletjé* > *plece, *mytьjé* > *mycie, *neseté* > *niesiecie*. The same restriction is observed in Ukr and SW Br as opposed to R *plečó, myt'jó, neset'ó* (NE dialect) or *nesec'ó* (NE Br).

3. *e* > *o* occurs regardless of stress: **čeló* > *czoło, *sestrá* > *siostra, *žená* > *żona, *neslá* > *niosła* as opposed to NW R *čeló, sestrá, žená, neslá* but in agreement with NE R *čoló, s'ostrá, žoná, n'oslá*. It is believed that at the time of *e* > *o*, P had not as yet developed its present system of fixed stress on the second last syllable. This, however, is unmaterial, for we have examples like *żona* and *żonaty* with stressed vs unstressed *o* < *e* according to the present norm.

4. The nature of the consonant preceding *e* is not a factor in *e* > *o*. In E Sl, as we have seen, there is a clear distinction between Ukr and SW Br and the rest of E Sl. Within the former group, at least in the earliest stages, *e* > *o* occurs only when *č, š, ž* or *j* precedes *e*. Elsewhere in E Sl *e* > *o* may occur after any consonant. P developments are in agreement with the latter group with this important difference — in P there is no dialectal division as in E Sl between *e* > *o* when stressed or when unstressed. Note the different types.

PSl	*bedró*	*bédra*	*čeló*	*čéla*	stress	environment
P	*biodro*	*biodra*	*czoło*	*czoła*	±	after all consonants
Ukr	*bedró*	*bédra*	*čoló*	*čóla*	±	only after *č, ž, š, j*
R	*bedró*	*b'ódra*	*čeló*	*čóla*	+	after all consonants

It is interesting that the NE dialects of R, those farthest removed from P, are in agreement with the latter in, at least, this one feature.

In connection with the preparation of dialect atlases after World War II, a fairly heavy concentration of "unchanged" *e*-forms were noted in southern Poland (essentially the west and central part of the south). Forms without *e* > *o* seemed to be particularly consistent when preceded by a labial, that is, *miełła, wiesna* < **metьla, *vesna* instead of the expected (and literary) *miotła, wiosna*. It was, therefore, assumed that in this region *e* > *o* had not occurred after labials. Later research has tended to undermine this position; it is now generally accepted that *'e* in forms like *wiesna* is not really an archaic feature preserved but a later reintroduction of *e*.

5. *e* > *o* in Lekhitic occurred only when *e* was followed by a hard dental (*d, t, z, s, l, r, n*) but not when followed by a velar or labial. This restriction is limited to Lekhitic and is unknown elsewhere. Thus, we have **teplъjь* > P *ciepły* vs R

*t'oplyj; *dal'ekъjь* > P *daleki* vs R *dal'okij; *peklъ* > P *piekł* vs R *p'ok*. There are, of course, some exceptions[33] but not enough to call into doubt the central fact that a velar or labial usually blocked *e* > *o*.

6. Only PSl *e* (< *ě*) underwent labialization in P. With some few exceptions of later origin new *e* < *ь* was not subject to the *e* > *o* process as it was in E Sl. Compare, for example, the development of **pьsъ, *lьnъ, *ovьsъ, *orьlъ* > P *pies, len, owies, orzeł* as opposed to R *p'os, l'on, ov'os, or'ol.*

THE *e* > *o* PROCESS IN THE LUSATIAN AREA. This process is well attested in all dialects[34] of both UL and LL but with such variation even within this small area that *e* > *o* still remains an unsolved problem in the historical phonology of these languages. One of the major difficulties is that both languages have tended to eliminate the *e* ~ *o* alternation by generalizing either *e* or *o* in all forms of a given morpheme (see pp. 257-8). This means that the original situation is by and large unrecoverable, nevertheless, certain features are discernible. Using the same points as those discussed in describing the situation in Lekhitic, we may summarize as follows:

1. *e* must palatalize a preceding consonant and be followed by a hard consonant before *e* > *o* can occur. These are the same prerequisites encountered elsewhere.

2. *e* > *o* takes place in final open syllable quite consistently in LL and W UL but less so in the Bautzen dialect (and those further east) on which the standard language is based. Thus, in LL and UL we find *e* > *o* in the second person plural ending (*njasešo* and *njesećo* but *njeseće* in literary UL), and *e* > *o* can arise here only as the result of a phonetic rule — there is no analogical model on which *o* could be introduced into this ending. Competing forms like LL *kšyšo* or *kšyše* < **krytьje,* or UL *myćo* or *myće* < **mytьje* may indicate that *e* > *o* in final open syllables was not common to all Lusatian dialects.

3. *e* > *o* takes place regardless of stress; as in P, **čeló* > *čoło, *žená* > *žona, *dal'ekъjь* > *daloki.*

4. The nature of the consonant preceding *e* is not a factor.

5. A labial or velar following *e* does not block *e* > *o* as in Lekhitic: **bergъ* > **br'egъ* > LL *brjog*, UL *brjóh; *melko* > **ml'eko* > *mloko; *teplъjь* > LL *šopły,* UL *ćopły.*

6. New *e* < *ь* does not usually undergo *e* > *o* in LL. The exceptions to this general rule are too few to allow the formulation of any general rule. In UL there are many examples but they are still inconsistent and contradictory. For example, in forms like *pos, kotoł, popjer* < **pьsъ, *kotьlъ, *pьpьrъ* all we see is *o* < *ь*, but

[33] Often cited are such forms as *poziom, pożoga, macocha, czop* < **pozemь, *požega, *macexa* (where *c* < *tj*), **čepъ.*

[34] This also includes those extinct dialects for which we possess documentation.

this does not necessarily mean that *ъ* > *e* > *o*. We may very well be dealing here with some specific development of *ъ*. In some instances *ъ* may have backed or labialized by an earlier process[35], as yet undefined, before *ъ* (or any other front vowel) palatalized a preceding consonant and in other instances *ъ* > *'e* and then underwent the same *'e* > *o* as etymological *e*. Thus, we have *kotoł* < **kotьlъ* without trace of *t'* indicating an earlier **kotьlъ* > **kotьlъ* (cp. LL *kośeł*) vs *worjoł* < **orьlъ* with *r'* as is expected when *e* > *o* (cp. R *or'ol*). The simple fact is that we are still unclear about the precise developments of strong *ь, ъ* in UL; it is, therefore, all the more difficult to define how one of them may have been involved in yet another change which itself was later subject to a great deal of analogical erosion.

Another interesting facet of the *e* > *o* change is that it apparently involves new *'e* < *ę* but only in open final syllables, thus, **telę* > *ćelo* but **telęta* > *ćelata*. In the UL area the front nasal must have been a low front of the type æ for it later developed to *'a* in all but word final position.[36] We, therefore, assume that *'æ* in this position raised, denasalized, merged with *'e* and experienced the same *e* > *o* process as the latter.

Since the nouns' ending in *-ę* were all neuters of either the *nt-* or *en*-stem (such as **telę* or **ramę*), it has been argued that the *o* in *ćelo, jehnjo* < **jagnę* or *ramjo* are of analogical origin on the model of *słowo, město* (where *-o* is original) or *polo* < **pol'e; morjo* < **mor'e* (where *'o* is the expected reflex of *'e*). The problem here, however, is that some instances of *-o* < *-ę* are hardly explainable as analogical processes. These are the accusative of the reflexive pronoun **sę* > **s'e* > *so* and masculine neuters nominative singular of the present participle active (**znaję, *xvalę, *xodę* > *znajo, chwalo, chodźo*). If a satisfactory nonphonetic explanation could be found for *so* < **sę* and the *o*-ending in participles, then it is almost certain that all other examples of *o* < *e* are of nonphonetic, that is, analogical origin. Tentatively, it may be pointed out that *so* < **sę* is not universally attested; some dialects and older documentation have *se*. The parallel accusative forms in the first and second person of the personal pronouns, *mje, će* < **mę, *tę* are known only in the forms cited, i.e. without *ę* > *'o*.

The greatest problem, however, is that of the "*o*-participles". Firstly, they are no longer true participles in the sense that they are merely adjectives derived from verbs. They are now used as verbal adverbs in exactly the same way as the R *znaja* < **znaję, kriča* < **kričę*. Secondly, the *'o*-ending has been extended far beyond where it is historically justified even assuming *-ę* > *-'e* > *-o* as a regular sound law of UL. Thus, we have such forms as *bjerjo, nieso, pječo, wjedźo*, etc.

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[35] We know that *ъ* > *ъ* in **trьt* and **tlьt* when a hard dental follows *r, l* or when a dental precedes *ъ* in **tьlt* without trace of palatalizing the preceding consonant as in **pъrstъ* > *porst, *tьlkti* > *tołc*.

[36] The change *ę* > *e* between soft consonants is a later process (XVII cent.) involving *a* of any origin. Therefore, we are not dealing with *ę* > *e* but *ę* > *a* > *e*.

although comparative evidence clearly indicates that the endings here were either *-y* (in S Sl) or *-a* (in W Sl and E Sl), for example, OCS *bery, nesy, peky, vedy* vs Cz *bera, nesa*, etc., Ukr as a remnant has *jakomoha*. True, there is nothing to prevent our assuming that *-ę* was generalized at the expense of *-a* as the one possible ending for the masculine neuter singular of this participle. After *ę* or its denasalized reflex had spread to all verbs, then the suggested *'e* > *o* could have taken place. Such a generalization of *-ę* is in fact documented in P. All we know about UL is that a general restructuring took place, but we do not know where or on what principles. Since the forms *znajo, bjerjo, widźo*, etc. now function as adverbs, they may very well have acquired their ending by analogy to other adverbial forms such as *dołho, sucho, ćicho, ćopło, ćěmno, dźiwno*, etc.[37] Finally, we must mention a very interesting but puzzling fact from Muskau, the most easterly Lusatian speaking region. This dialect rightfully belongs to LL but shares many features with UL, one of which is the development of *ę* > *'a*, not *ę* > *ě* as in LL. Similarly the Muskau dialect shares with eastern UL the feature that *e* > *o* is less consistently attested than in western UL, especially in final open syllables. Nevertheless, this dialect does have the *o*-ending in adverbial participles (*stojo, sedźo*, etc.) but not in neuters of the type *ćele* < **telę, brěmje* < **bermę*, nor in the reflexive *se* < **sę*. This constitutes fairly strong evidence that *o* in *stojo*, etc. is not the result of a sound law but is morphologically conditioned. At least it demonstrates that the presence of *o* in *stojo* (standard UL *stejo*) is a separate process, not connected with the appearance or absence of *o* in *ćelo* ~ *'cele* or *brěmjo* ~ *brěmje*. If it is true for this dialect, it could very well be true for UL as well. The presence of *znajo, wjedźo*, etc. cannot be cited to prove the phonetic (as opposed to analogical) origin of *o* in *ćelo*, etc.

After discussing the *e* > *o* phenomenon, we must now define what is not included in this process. There are several instances of the rounding of *e* and *ь* which in their final reflexes seem to belong to the *e* > *o* process but are something quite different. Most of these concern the velarizing influence of *l* in the **telt-* and **tьlt-* formulae.

The greatest number of these labializations is found in E Sl. Here **tьlt* > **tъlt* > R *tolt*, Ukr, Br *tovt*, and **telt* > **tolt* > *tolot*. There are, however, some examples of **telt* > **telet* in E Sl but they are rather rare. W Lekhitic agrees with E Sl in this respect, **tьlt* > **tъlt* > *tolt; **telt* > **tolt* > *tłot*.

In P, UL, and LL a similar rounding is observed in *telt* and *tьlt* but only when *č, š, ž* precedes *e* or *ь*. With *č, š, ž* + *ьlt*, the end result is the same as in E Sl, but the intermediate stage or stages must have been different. In E Sl, for example, in the root **žьltъjь* we may assume a backing of *ь* > *ъ*, and then the normal *ъ* > *o*, thus, **žьltъjь* > **žъltъjь* > R *žoltyj*. The same explanation can perhaps be ap-

[37] An equal if not greater number of adverbs are formed with *'e* as *měrnje, słabje, sylnje, krasnje*, etc. But *'e* could not function as an adverbial marker in those dialects which still had third person singular forms like *bjerje, znaje, njese*.

plied to UL, for here also strong *ъ* > *o* (although not consistently) but for P and LL this will not work. In neither language does *ъ* > *o* but rather *ъ* > *e*, nor can we assume **žьltъjь* > **želty* and then *e* > *o*, for new *e* < *ь* does not ordinarily participate in the *e* > *o* change. Original **tъlt* > *tołt* only when a labial preceded *ъl* (**mъlva* > Old P *mołwa* > *mowa*), but not when *ьl* > *ъl* before a hard dental as in **vьlna* > **vъlna*; the result is both *wełna* (literary SW P dialects) and *wiołna* (NE dialects). The labialization in forms like *wiołna* are, however, confined to a rather small area whereas *o* in *č, š, ž* + *olt* < *č, š, ž* + *ьlt* is attested everywhere in Lekhitic, even in those areas where *e* > *o* is otherwise unknown. The problem remains unsolved; only the difficulties may be defined here.

Upper Lusatian goes further than does either P or LL in shifting **tьlt* > **tъlt*. That is, it is closer to E Sl in the development of **tъlt* but not in the development of **telt; *tьlt* > **tъlt* > *tołt* not only when *č, š, ž* precede *ьl* but when a dental precedes or when a hard dental follows *ьl*. Similarly *ь* backs in **tьrt* > **tъrt* when a hard dental follows *ьr*. Since the normal reflexes of **tъlt, *tъrt* > *tołt, *tort* as opposed to **tьlt, *tьrt* > **t'elt, *t'ert* we may get an *o* ~ *'e* alternation within a root: **pьlnъjь* (> **pъlnъjь*) > *pełny* but **pьlniti* > *pjelnić; *mьrtvъjь* (> **mъrtvъjь*) > *mortwy* but **sъmьrtь* > *smjerć*. However, this is not the same *'e* > *'o* change as in R *m'ortvyj* vs *smert'*, but the result of *ь* > *ъ* at an earlier date, before overall palatalization by front vowels. The mixing of *ь* and *ъ* in UL is apparently not limited to the *tьlt-* and *tьrt*-formulae but occurred on a much wider scale although under conditions as yet undefined. Such forms as *pos* < **pьsъ, popjer* < **pьpьrъ, kotoł* < **kotьlъ*, etc. may be best explained by assuming an intermediate stage whereby **pьsъ* > **pъsъ, *pьpьrъ* > **pъpьrъ, *kotьlъ* > **kotъlъ*.

In other words we exclude from the traditional *e* > *o* process any forms in which the consonant preceding *o* is hard. This is evident if we compare two *tort*-formula forms: *žłob* vs *mloko*. In the first example, *o* did not arise from *e* because *ł* is not palatalized. It was never followed by *e* — only by *o*. It can be explained only by assuming a labialization of *e* before metathesis occurred; that is, **želbъ* > **žolbъ* > **žlobъ* as opposed to **melko* > **mleko* > **ml'eko* > *mloko*. Therefore, the examples cited above like UL *pos* must be explained in some other way. Only if there were ground for assuming that *p* in *pos* had at one time been soft would this form come under the usual *e* > *o* rubric as does R *p'os*.

The same reasoning applies to E Sl **telt* > **tolt* > **tolot*. Here *e* backed under the influence of a velarized *l* but before *e* palatalized the preceding consonant. If we were to explain this as part of the traditional *e* > *o* change, we would have to assume **telt* > **t'elt* > **t'olt* but **t'olt* could give rise only to a form like **t'olot* in which the initial consonant would be palatalized, but such are nowhere to be found.

In the same way we must assume a general shift of **tьlt* > **tъlt* before any overall palatalization occurred, thus, **vьlkъ* > **vъlkъ* > R *volk*, Ukr *vovk* with

hard *v*, not like **pьsъ* > **p'ьsъ* > **p'es* > R *p'os* vs **pьsъ* > Ukr *pes* — if there is no *p'* then there is no *ь* > *ъ* or *'e* > *'o*. The **tьlt* > **tьlt* can also occur before a soft consonant. Note the difference: **žьltьjь* > Ukr *žovtyj* and also **žьltěti, *žьlčь* > *žovtity, žovč* as opposed to **čьrnъjь* > **čъrnъjь* > *čornyj* vs **čьrnь* > *čern'* with no backing before *n'*.

Synopsis of Chapters VI and VII: The principal phonological developments in Common Slavic, adapted from G. Shevelov, *The Prehistory of Slavic,* New York: Columbia University Press, 1965, pp. 633-4.

GROUP I:

This group includes those features which are common to all Slavic languages and, therefore, took place before any dialectal divisions arose. The first eight occurred during the time span from ca. 2500 or 2000 BC to the beginning of the Christian era. From that point on, dating can be somewhat more accurate, and the ones cited are those of Shevelov.

1. Loss of aspiration by the aspirated stops: *bh, dh, gh, ĝh, g^{w}h* > *b, d, g, ĝ, g^{w}*.
2. Development of distinctive rising (acute) and falling (circumflex) pitch or intonation although some believe that intonations were inherited from PIE and not developed separately in Balto-Slavic.
3. Loss of syllabic sonants: *r̥, l̥, m̥, n̥* > *ĭ/ŭ* + *r, l, m, n*. It is still not established why in some instances *r̥*, etc. gives *ĭr* but *ŭr* in others.
4. Loss of labial articulation in the labiovelars: *k^{w}, g^{w}* > *k, g*.
5. Development of *tt, dt (pt)* > *st*.
6. Rise of *x* by the so-called *iurk*-formula: *s* > *x/iurk* _____ V.
7. Development of palatovelars *k̂, ĝ* > *s, z*. Note that *s* < *k̂* is not affected by the *iurk*-formula rule.
8. (a) Merger of *ā, ō* > *ā̆* and *ă, ŏ, ə* > *ă̆*.
   (b) Lowering of *ē* > *æ̆* and *ĕ* > *æ̆*
   See p. 97 regarding the use of symbols other than *ă̆* or *æ̆*.
9. The law of the open syllable comes into operation in the following way:
   (a) loss of final *n, m* after short vowels
   (b) loss of final *t, d*
   (c) simplification of clusters until only a very few are permissible
   (d) loss of final *s, x*

   } 1st BC - 6th AD
10. Development of prothetic consonants before high vowels: *ŭ-* > *vŭ-* and *ĭ* > *jĭ-:* 1st - 5th AD.
11. *Jotation* of all consonants. Those clusters still existing were also subject to this process: 5th - 8th AD. See also Group II, No. 6 regarding *d', t'*.

pj > *pl'*[1]	*nj* > *n'*	*skj*, *stj* > *šč*[3]
bj > *bl'*	*lj* > *l'*	
mj > *ml'*	*rj* > *r'*	*zgj*, *zdj* > *ždž*[3]
vj > *vl'*	*dj* > *d'*[2]	
gj, *zj* > *ž*	*tj*, *ktĭ*, *gtĭ* > *t'*[2]	*snj* > *šn'*
		slj > *šl'*
		znj > *žn'*
xj, *sj* > *š*		*zlj* > *žl'*
	kj > *č*	

12. Development of prothetic *j* before ă- (traditionally *e-* > *je*, *ě-* > *jě*) and *u̯*, ĥ or ĥu̯ before ă. Prothetic *j* merges with *j* inherited from PIE, but the prothetic element before ă occurs only in this one environment.
13. First regressive palatalization of velars caused by any front vowel:[4] *k* > *č*, *g* > *ž*, *x* > *š*, also *sk* > *šč* and *zg* > *ždž*[3] (5th - 6th AD)
14. Fronting of back vowels after palatals: *sjū* > *š'ū* > *š'i*, *njă* > *n'ɑ* > *n'ǣ* (traditionally *njo* > *n'o* > *n'e*) etc. (6th - 7th AD).
15. Monophthongization of all diphthongs (traditional notation in parentheses) in the following order (6th - 7th AD):

ɑu̯ (*au̯*) > *ū*₂	*ū*₂ never merges with *ū*₁
æu̯ (*eu̯*) > *jū*₂	*j* from this source also causes iotation
ɑi̯ (*ai̯*) > *ě*₂, *ī*₂	*ě*₂ merges completely with *ě*₁
	*ī*₂ merges completely with *ī*₁
æi̯ (*ei̯*) > *ī*₂	this *ī*₂ also merges with *ī*₁

GROUP II:

Here are listed those processes which led to the disintegration of Common Slavic and emergence of separate Slavic languages. Although there may be some disagreement in dating the second palatalization, few scholars would place it much before 500 AD, and this is usually the traditional date for the beginning of dialectal divisions. After this time Common Slavic continues to experience the same processes but the results differ from region to region. Of these listed below only Nos. 2, 5, and 9 give more or less identical reflexes everywhere.

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[1] This epenthetic *l* is lost at morpheme boundaries (but not in roots) in all of West Slavic before the earliest attestation of these languages and in the Macedonian-Bulgarian area at a later date.

[2] *d'* and *t'* are preserved only in Serbo-Croatian; in all other regions of Slavic they have further developments. The treatment of *ktĭ*, *gtĭ* is not a iotation process but they always share the same developments as *tj*.

[3] *šč* and *ždž* (from whatever source) undergo simplification in many areas.

[4] After causing this palatalization æ backs to ɑ and then ɑ > *a* (traditionally *ě* > *a*).

1. Second palatalization of velars caused by the new front vowels, *ě₂, i₂ < ai̯* (6th - 7th AD; Lamprecht: 575-650, ±25)
   k > c, g > dz > z, x > s' or *š*
   kv > cv or *kv, gv > dzv > zv* or *gv*
2. Development of nasal vowels (7th AD)
   any front vowel + *n/m* + *C > ę*
   any back vowel + *n/m* + *C > ǫ*
3. Third or progressive palatalization of velars (7th - mid 9th AD)
   ĭ̆, ę + k, g, x + V (except *ŭ̆*) *> c, dz > z, s'* or *š*
4. Simplification or retention of *dl, tl* (8th - mid 9th AD)
5. Development of *ū₁ > y* (Russian *ьı*) and later to a front vowel in most regions of Slavic where it often merges with *i* (8th - 9th AD)
6. Final development of *t'* (from *tj, ktĭ̆, gtĭ̆*) and *d'* (from *dj*; 8th - 9th AD)
7. Metathesis of *ŏ́rt- > rat-, ôrt- > rot* or *rat*[1] (8th - mid 9th AD)
8. Metathesis or pleophony of *tort > trot, trat* or *torot*[1] (mid 9th AD)
9. Shift in vowel system from a quantitive contrast to one of quality in the following order:
   ĭ, ŭ > ь, ъ
   ă, ā > o, a } early 9th - mid 10th AD
   ǣ, ǣ > e, ě[2]
10. Loss of the former prothetic before new *a, o* but a new prothetic *j* before *a < ā*. Before new *o < ă* there is either no prothetic or a *u̯*-type which does not merge with *V* (8th - 9th AD)
11. Development of *tъrt*[2] (early 9th - 10th AD)
12. Shortening of most formerly long vowels (early 9th - 10th AD)
13. Development of neo-acute (new rising pitch) and the restructuring of the stress, quantity and intonation systems (mid 9th AD)
14. Overall palatalization of consonants before front vowels giving rise to the so-called hard vs soft contrast in consonants (9th - 11th AD)
15. Loss of intervocalic *j* and contraction: *VjV > V̄* (10th AD and later)
16. Loss of the so-called weak jers (10th - mid 12th AD).

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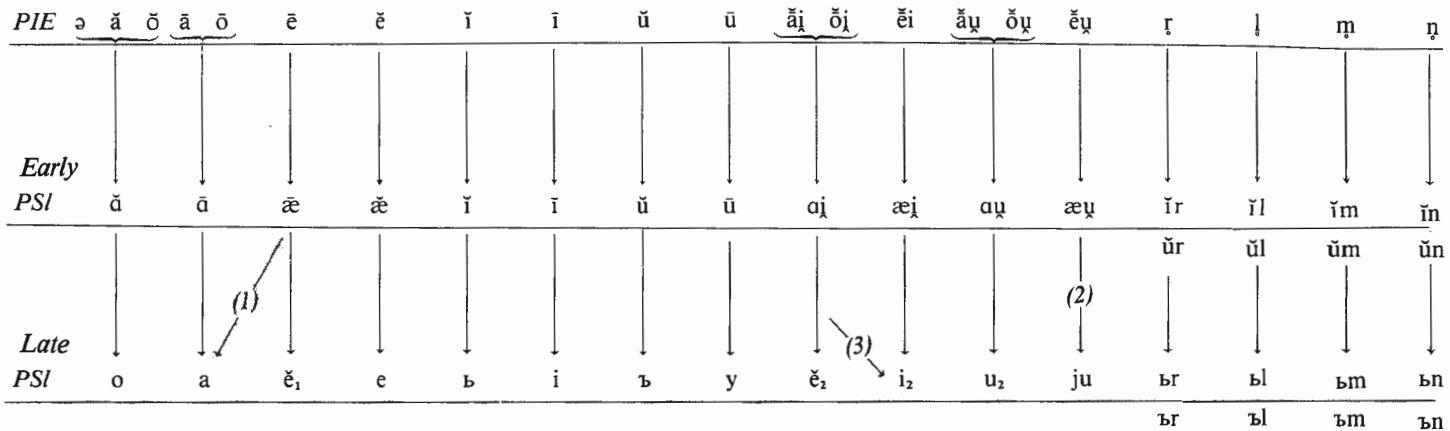
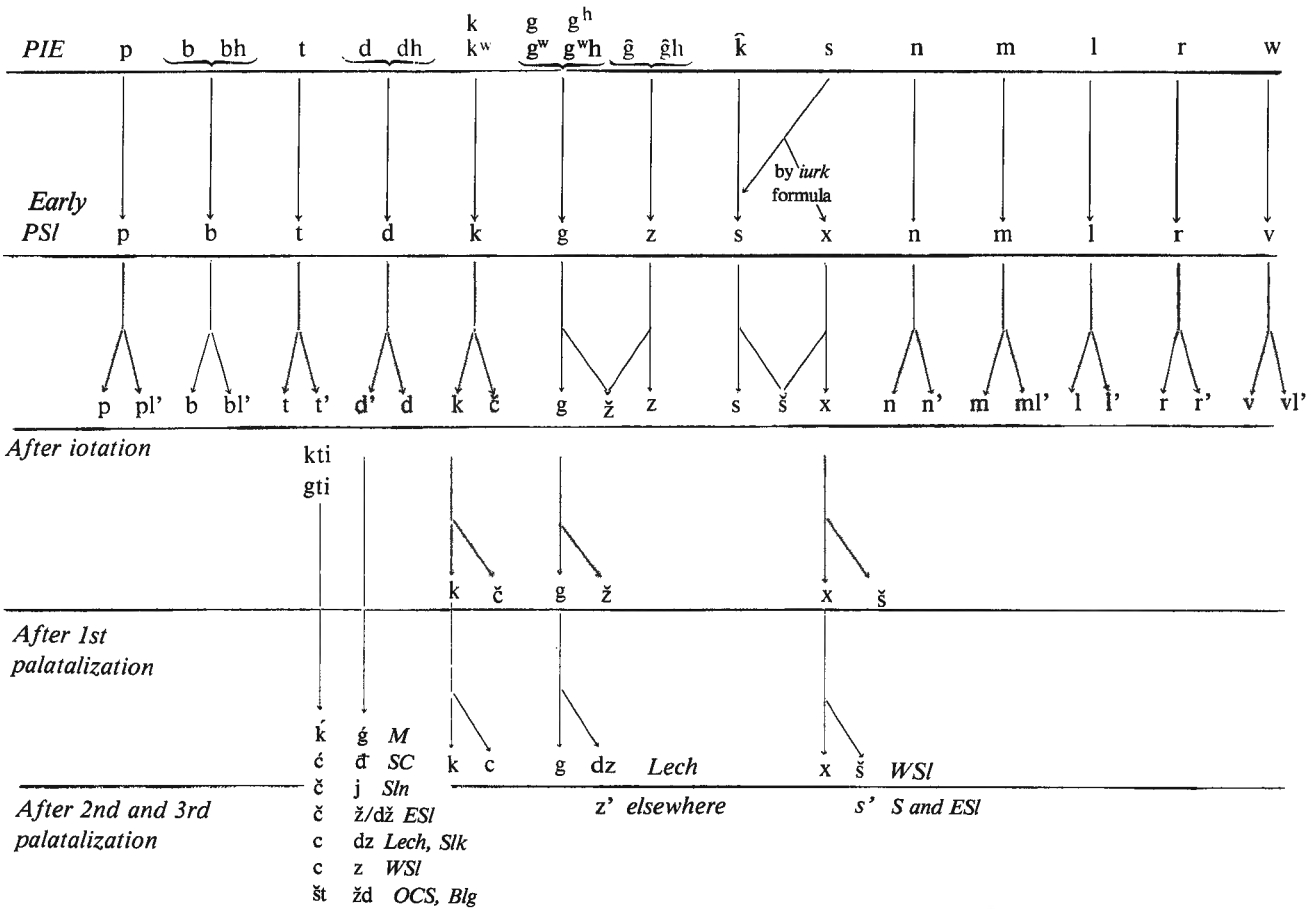
[1] Nos. 7, 8 are expressed in traditional notation. More accurate would be *ắrt- > rā́t- > rat-*, or *tart > tărăt > torot* and so on.

[2] The *t* here stands for any consonant; *r* can also stand for *l*. In *tort, o* also stands for *e*, and *ъ* for *ь* in *tъrt*. Therefore, *tъrt* or *tort* covers four groups: *tort, tolt, tert, telt*, etc.

DEVELOPMENT OF THE VOWELS



(1) ǣ (or *ē*, *ĕ*) > ā > *a* after it causes the 1st palatalization.
(2) *j* of *ju* < æu̯ (or *eu̯*) also brings about iotation.
(3) æi̯ (or *ɑi̯*) > i_2 only in certain specific morphological categories.


PIE
p b bh t d dh k kʷ g gʷ gʷh ĝ ĝh k̂ s n m l r w
Early PSl
p b t d k g z s x n m l r v
by iurk formula
p pl' b bl' t t' d' d k č g ž z s š x n n' m ml' l l' r r' v vl'
After iotation
kti
gti
k č g ž x š
After 1st palatalization
ḱ ǵ M
ć đ SC
č j Sln
č ž/dž ESl
c dz Lech, Slk
c z WSl
šť žd OCS, Blg
k c g dz Lech x š WSl
z' elsewhere
s' S and ESl
After 2nd and 3rd palatalization

CHAPTER VIII

The Prosodic Features of Late Proto-Slavic

General remarks. When we speak of prosodic features in Slavic linguistics, we have in mind three phenomena. These are:

1. stress patterns, accent systems or accentuation
2. pitches, also called intonations, and
3. distinctive vowel quantity or length.

Some textbooks, however, prefer to use the more modern term "suprasegmental" instead of prosodic, but in textbooks devoted to Slavic linguistics it is quite common to apply the term "accentuation" or "accentology" to all three features. For example, Bulaxovskij entitled his famous monograph on the origin and development of quantity in Czech *Akcentologičeskij kommentarij k češskomu jazyku.* This is simply because the present Czech system is not historically explainable without reference to the accentual, quantitative and intonational systems of PSl. In greater or less degree this applies to the prosodic features of all Slavic languages: hence, accentuation or accentology has come to be used as a cover term for the longer but more accurate prosodic or suprasegmental features.

True, it is perfectly possible to describe in detail the stress patterns (that is, accentuation) of, let us say, modern Sln. However, it is impossible to relate these patterns with those of PSl or any other modern Slavic language without also drawing upon our knowledge of PSl intonations and quantity.

Before attempting an investigation of a language like PSl, known to us only on the basis of reconstruction, let us look at the prosodic features of a living language like R. Here, as we know, stress can be on any syllable, first (*výsmotret', nóžen'ka*), second (*vysmátrivat', borózdka*), third (*borozdá, golová*), fourth (*boronovát', veretenó*) and so on. Languages which have this feature are said to have free stress. However, once we establish that any given R form is stressed, say, on the third syllable as in *golová*, this does not mean that the stress will remain on that same syllable in every grammatical form of that same word, thus, *golová* vs *gólovu* or *gólovy* or every *pód golovu* without stress. This phenomenon is known as mobile stress. As regards both freedom and mobility of stress as well as the position of the stress itself, R is regarded as one of the most archaic of Slavic languages.

In R the stressed syllable is made prominent by a greater tenseness and

pressure of the breath exhaled during articulation. This feature is referred to as dynamic stress (sometimes also as force or stress accent). PSl, on the other hand, was characterized by pitch accent or musical stress. This means the stressed syllable is marked with a musical pitch or tone (or intonation). As can readily be understood pitch is a much more versatile means than dynamic stress, for pitch can occur in a great variety of ways whereas dynamic stress can merely emphasize the fact that a given syllable bears the accent. For example, in SC any stressed syllable may have one of four distinct pitches (long and short rising, long and short falling).

To the best of our knowledge PSl in its last period possessed two such pitches — one rising (called acute), one falling (called circumflex). It may have been possible at an earlier period for unstressed syllables also to bear an intonation. This point is still open for discussion, but it seems quite clear that the later PSl prosodic system, from which the modern systems are derived, did not (or no longer) possessed this feature. Both PSl pitches, therefore, could appear only on a stressed vowel, but the circumflex could occur only on the first syllable of a form which is characterized by mobile stress.

The third factor of a prosodic system is that of vowel quantity. We have seen that for the greater part of its history PSl did indeed possess distinctive vowel length but restructured this feature into one of qualitative contrasts at a relatively late date in its history. Certain areas of Slavic then reestablished distinctive vowel length when as a result of other processes many new long vowels came into existence.

If then we return to the example of R we would want to investigate the following:

1. What relationship exists between the stress patterns of modern R and those of PSl?
2. How and when were the PSl intonations lost? What were the stages in the evolution from pitch stress to dynamic stress?
3. Did R undergo any of the innovations giving rise to new long vowels? That is to say, was distinctive vowel length to any extent, however short-lived, reestablished in this region?

As it happens in the case of R itself, historical linguistics can as yet provide very little information regarding the last two questions although they remain the object of exhaustive research. The answers to question one are much better known, occasionally even in detail, but much still remains to be done. In any event, no matter what Slavic language one may choose as an example, any discussion of the historical development of its prosodic features must always deal with these three facets of the same problem. In fact, these three factors are so intricately connected that there is no practical way to study them in separation. Any discussion of any one of them will of necessity involve a certain amount of overlapping; however, no discussion can proceed without some sort of order. We

will thus investigate the prosodic features of PSl in the following manner:

Firstly, we will attempt to outline the stress patterns of PSl and the relationship of these patterns to the two original or earliest intonations. Secondly, we will examine the reflexes of these intonations in the modern languages. Next, some basic information will be given about the so-called new intonations of later PSl, that is, the neo-acute (or new rising pitch) and the neo-circumflex (or new falling pitch). Finally we will discuss the origins of long vowels in these languages which reintroduced distinctive quantity. One of the major sources of length will be described in the discussion of neo-acute; there remains to be described such phenomena as the preservation of PSl lengths, contraction and compensatory lengthening.

The stress patterns or accentuation of Late Proto-Slavic. It is difficult to deal adequately with accentuation in outline, for there are great gaps in our knowledge and what is known is complicated. Therefore, the discussion here will be limited to those features about which there is general agreement. In order to reduce the data to manageable proportions, only the two major parts of speech, nouns and verbs will be dealt with, and the dual will be ignored.

The accumulated evidence allows us to reconstruct three stress patterns for Late PSl. In Slavic linguistics it has become customary to label them as types a, b and c.

1. **type-a:** Stress is fixed on one and the same syllable of the stem throughout the entire paradigm. The vowel bearing this type of stress was characterized by a rising or acute pitch (or intonation) which will be marked here with —˝.

2. **type-b:** Stress is fixed on the first syllable after the root or stem. In this instance we are not certain about the type of intonation born by the stressed vowel in an open final syllable. Later developments have erased intonational distinctions in this position. Therefore, vowels in this environment will be marked simply for stress (with a vertical dash above the vowel in question).

3. **type-c:** Stress here shifts from the final to initial syllable. For this reason this stress pattern is often called the marginally mobile. Regarding intonation of final syllables we have the same problem as with type-*b*, but stress on the initial syllable is always accompanied by falling or circumflex intonation (marked —̂).

Before proceeding to any examples, let us set out clearly our use of diacritics.

—˝ rising pitch (acute) on long vowels or long rising
—̀ the same pitch on short vowels or short rising
—̂ falling pitch (circumflex) on long vowels or long falling
—̏ the same pitch on short vowels or short falling
—̄ stress without reference to pitch
—́ neo-acute or new rising pitch

The use of four diacritics for pitch does not signify that anyone posits four distinct pitches or intonations for PSl. There are no grounds for positing any more than two — acute and circumflex. It is simply a question of clarity; long and short vowels even when sharing the same pitch often develop differently. Such divergent developments are, therefore, more easily followed by using a separate symbol to represent each possibility. Similarly, the use of ◌̀ does not mean that a vowel thus marked had no intonation but simply that the intonation cannot be determined precisely or is irrelevant.

Regarding the use of ◌̂ in such examples as *gôlvǫ, gôlvy*, see Comment No. 4.

	Nouns of Type-a		*Type-b*		*Type-c*	
SINGULAR:						
N	lípa	rắkъ	žená	stolь̀	golvá	zǫ̂bъ
G	lípy	rắka	žený	stolà	golvý	zǫ̂ba
D	lípě	rắku	ženě̀	stolù	gôlvě	zǫ̂bu
V	lípo	rắce	žéno	stóle	gôlvo	zǫ̂be
A	lípǫ	rắkъ	ženǫ́	stolь̀	gôlvǫ	zǫ̂bъ
I	lípojǫ	rắkomь	ženǫ̀jǫ	stolòmь	golvojǫ́	zǫ̂bomь
L	lípě	rắcě	ženě̀	stolě̀	golvě̀	zǫbě̀

	Nouns of Type-a		*Type-b*		*Type-c*	
PLURAL:						
N	lípy	rắci	žený	stolì	gôlvy	zǫ̂bi
G	lípъ	rắkъ	ženь̀	stolь̀	golvь̀	zǫbь̀
D	lípamъ	rắkomъ	ženắmъ	stolòmъ	golvamь̀	zǫbomь̀
A	lípy	rắky	žený	stolỳ	gôlvy	zǫbỳ
I	lípami	rắky	ženắmi	stolỳ	golvamì	zǫbỳ
L	lípaxъ	rắcěxъ	ženắxъ	stolěxъ	golvaxь̀	zǫběxь̀

	Verbs of Type-a		*Type-b*		*Type-c*	
PRESENT:						
stắvl'ǫ		stắvimъ	služǫ́	služìmъ	tvòr'ǫ	tvorimь̀
stắviši		stắvite	služíši	služìte	tvoríši	tvoritė
stắvitь		stắvętь	služítь	služętь	tvoritь̀	tvorętь̀

Verbs of Type-a		*Type-b*		*Type-c*	
l-PARTICIPLE:					
stắvilъ	pắdlъ	moglь̀	neslь̀	pīlъ	dь̏ralъ
stắvila	pắdla	moglà	neslà	pilá	dьralá
stắvili	pắdli	mogli̇	nesli̇	pīli	dь̏rali

COMMENTS ON THE ABOVE PARADIGMS

1. Both types *a* and *b* are forms of fixed stress, but there is essential difference. Observe that in type-*a* paradigms, the stress is always fixed to the same vowel whereas in type-*b* the stress is fixed rather to various vowels of the same syllable.

2. Type-*a* forms do not always have the stress fixed to the initial syllable of a root. Other syllables can be the recipient of fixed stress and rising (acute) intonation. For example, **utěxa, *večèr'a, *zakònъ, *ǫtròba, *malĭna, *učeníca, *kǫpělь*. Note that in the case of the last three examples, the stress is fixed not to a root but to a suffix vowel. Such instances are not numerous but exist nevertheless, and are classed as type-*a* because stress is fixed to one and the same acute vowel throughout the paradigm.

3. Type-*a* is subject to one restriction. There are no clear examples of this type of stress with roots containing a short vowel (*e, o, ь, ъ*) in the initial syllable. Thus, such forms as **dьnь, *sъnъ, *vozъ, *nesti* could not be stressed according to the type-*a* pattern but **zakònъ* or **večèr'a* can.

This restriction does not apply to *e, o, ь, ъ* in the traditional *tort* or *tъrt* formula forms. This is because *e, o, ь, ъ* + sonant functioned as a diphthong, that is, a long vocalic unit and, therefore, could be the recipient of long rising intonation in an initial syllable. Examples are **vôlkъ* vs **vőlna, *zôlto* vs **sőlma, *bĕrza* vs **bêrgъ, *vôrxъ* vs **gŏrdlo*. Thus, in these examples we mark the pitch with the same symbols which are usually employed for long vowels.

4. All type-*c* forms are subject to one very interesting peculiarity. Any syllable bearing circumflex intonation, which can occur only in initial syllables, will shift its stress onto an adjacent preposition, prefix or particle. Thus,

**gôlvǫ* vs **nâ golvǫ, *ĭ na golvǫ, *golvǫ žè*
**zǫ̂bъ* vs **zâ zǫbъ, *ĭ zǫbъ, *zǫbъ li̇*
**nèsǫ* vs **nè nesǫ, *prĭnesǫ, *ĭ prinesǫ, *nesǫ li̇*
**pīlъ* vs **zâpilъ, *nè pilъ, *ĭ pilъ, *pilъ žè*.

On the other hand, if the stress is on the final syllable, it remains there. Thus, **pīlъ* gives rise to **zâpilъ* but from **pilà* there is **zapilù, *nâ golvǫ* but **do golvỳ* (gen.); **ĭ zǫbъ* but **i golvà* (nom.); **pīlъ* and **pilъ sę̀* but **pilà* and **pilà sę*.

5. There is still some question about whether the mobile paradigm in nouns maintained its marginality up until the disintegration of PSl. This applies to the instrumental singular and plural and also to the locative and dative plural. Thus, for

example, we have in modern Ukr *holovòju* or in R *golovòju* — never *holovojù* or *golovojù*. Similarly in the plural, we have R *goràmi*, Ukr *horàmy*, Čakavian *goràmi* — never *gorami*, etc. All of this indicates that the stress of these forms was restructured on the model of the type-*b* pattern. In forms like R *goràx, goràm* or Ukr *horàx, horàm*, it is impossible to determine whether they derive from **goramъ̀* or **gorămъ*, from **goraxъ̀* or **gorăxъ*. The Cz and Slk *horách* (with long vowel resulting from neo-acute) indicates that the stress **goraxъ̀* was retained until after the breakup of PSl but Čakavian *gorȁh* (with short rising vowel) points to **gorăxъ* as the proto-type for that area of Slavic. It is evident, therefore, that type-*c* underwent certain changes bringing it closer to type-*b*, but it is still not certain which of these stress shifts belong to PSl and which are limited to one specific dialectal region.

6. One other aspect of accentology is worthy of mention although it cannot be dealt with in any detail. This is the problem of the accentuation of derived forms. That is to say, given a root which exhibits, for example, circumflex intonation (type-*c*), what stress pattern will it exhibit if prefixes and/or suffixes are added to it? A few examples will be illustrative.

The root **dôlgъ* 'debt, obligation' belonged to the type-*c* pattern, and if the adjectival suffix *-ьn-* is added, we still find type-*c* stress: **dôlžьnъ, *dьlžьnà, *dôlžьno*, etc. However, the addition of the nominal suffixes *-ik-* (masc.) and *-ic-* (fem.) gives us the following picture: **dьlžьnikъ̀, *dьlžьnikà* (type-*b*) but **dьlžьnĭca* (type-*a*). Adding the suffix *-jь* to form the definite adjective **dьlžьnъ̀jь* produces contradictory evidence. The R *dòlžnyj* gives us grounds to posit that the stress was retracted back to the root[1] whereas Cz *dlužný* (with short *u*) would rather point to type-*b* stress, that is, **dьlžьnъ̀jь*.

The development of the Proto-Slavic intonations. SC and Sln are the only languages which continue the PSl intonations as distinct intonations or pitches. Elsewhere such distinctions are lost and only remnants in the form of vowel quantity (or later qualitative development) or stress remain.

SC and Sln share one common development. All vowels with the original long rising pitch (acute) shorten. In Sln it will relengthen to become long rising (-́) again except in final position. In final positions it passes its stress to a preceding syllable if there is one. If it remains on a final syllable it becomes short falling. In SC the original acute later becomes short falling (-̏). Before this happened, it may relengthen to long rising (-́) if followed by *j* in any position and by *m, n, l, r, v* in an internal syllable after the loss of a weak jer. Then like all long rising intonations, it later becomes long falling. The short falling intonation disappears in all but initial syllables since all other stressed syllables are subject to a stress shift which moves the stress to any preceding syllable. In the examples are cited only the PSl reconstructions and modern SC or Sln without reference to intermediate

[1] This would mean that it belonged to a new type of stress to be described elsewhere.

phases: PSl long rising > short falling as in **rãkъ* > SC, Sln *rȁk*;[2] **brãtrъ* > SC, Sln *brȁt* but SC *brȁta* vs Sln *bráta*, **mȍrzъ* > SC, Sln *mrȁz* but PSl **sõlma* or **malĩna* > Sln *sláma, malína* (*á, í* by relengthening) vs SC *slȁma, màlina* with unstressed *i* because of stress shift; PSl **kožűxъ, *kožűxa* (gen. sing.) > SC *kòžuh, kòžuha* but Sln *kóžuh* vs *kožúha*.

Note that Sln relengthens all the former acutes in all but final syllables as in *bráta* vs *brȁt, sláma, malína*. Stress retraction can occur in Sln only from a short final syllable as in **kožùh* > *kóžuh* but SC from any vowel — long or short, final or nonfinal (**kožùh* > **kožùh* > *kòžuh*). Note also that in SC a direct reflex of original acute is preserved only in initial syllables.

Circumflex intonation remains in both Sln and SC as a falling pitch. In SC the short circumflexes remain short falling (◌̏) and lengthen only in syllables newly closed by the loss of a weak jer. The long falling remains long falling (◌̂) except in forms of over two syllables. Here two syllables must be understood in the PSl sense, that is, a lost jer is counted as one of the syllables. In Sln, on the other hand, all circumflex vowels (long and short) are reflected as long falling. Any vowel with falling pitch shifts its stress one syllable forward whenever possible. Compare the similarities and differences between the two languages:

**sỹnъ* > SC, Sln *sîn*; but **sỹnove* > SC *sînovi* vs Sln *sinọ̑vi; sỹnu/a* > SC *sîna*, Sln *sinû*

**nȍsъ* > SC *nôs*, Sln *nọ̑s; *nȍsa* (gen. sing.) > SC *nȍsa* vs Sln *nosâ*
**ôlkъtъ* > SC *lâkat* vs Sln *lakât*
**mọ̑žь* > SC *mûž*, Sln *mọ̑ž; *mọ̑ža* (gen. sing.) > SC *mûža* vs Sln *možâ*
**slȍvo* > SC *slȍvo* vs Sln *slovọ̑*
**bȍlьnъ* > SC *bȍlan* vs Sln *bolân*
**gȍlọbь* > SC *gȍlūb* vs Sln *golọ̑b*

Also in accentual units of the type **zȃ bordọ* > SC *zȃ brādu* vs Sln *za brâdo*. Without the preposition the accusative singular is SC *brâdu* vs Sln bradọ̑ < **bôrdọ*. Regarding Sln examples like *slovọ̑* or *nosâ* etc., there may have been an intermediate phase of **slôvo, *nôsa* before the shift to *slovọ̑, nosâ*. (See pp. 212-13.)

Because of the complications involved in the evolution of SC and Sln intonations, it is best to summarize the developments in chronological order. The neoacutes, although not discussed yet, will be included here; their evolution cannot be separated from the older PSl intonations.

SUMMARY I: **The acute or rising intonations in Serbo-Croatian**

1. The old acute: All long rising vowels shorten; thus, distinction of ◌̋ vs ◌̀ is lost: **rãkъ* > **ràkъ, *lĩpa* > **lìpa* merging with **nāròdъ, *ọ̄tròba*.

[2] Sln reference works usually mark short falling ◌̀ but ◌̏ is used here for sake of consistency.

2. ◌̀ > ◌́ (lengthens) before *j* and before *r, l, m, n, v* in an internal syllable when a weak jer is lost: **krȃjь > *kràjь > *kráj, *prȃvьda > *pràvьda > *právda* but **stȃrъ > *stàrъ > *stàr, *prȃvъ > *pràvъ > *pràv* without lengthening in a final syllable. This ◌́ merges with ◌́ of other sources, such as neo-acute.

3. All rising intonations become falling, that is, ◌́ > ◌̂ and ◌̀ > ◌̏: **kráj > krâj, *stàr > stȁr, *bràt > brȁt, *lìpa > lîpa.* These new ◌̂ and ◌̏ merge with those already in existence. See Summary III.

4. All stressed syllables regardless of length or intonation shift stress one syllable to the left: **nārȍd > národ, *kūkȍlj > kúkolj, *večȅra > vèčera, *kolȃč > kòlāč.* Notice, this shift produces two new rising pitches: long ◌́ and short ◌̀. A long vowel losing stress does not lose length.

5. The neo-acute: New rising pitch can be on either long ◌́ or short ◌̀ vowels. It arose after process No. 1.

6. ◌̀ merges with ◌̀ <◌̏ (process No. 1) and ◌́ merges with ◌́ < ◌̀ (process No. 2): **dъlžьnikъ > *dužník, *kolačь > *koláč* as ◌́ in **právda; *bobь > *bòb, *konь > *kòn'* as ◌̀ in **ràk, *nārȍd.*

7. ◌́ > ◌̂ and ◌̀ > ◌̏ as in No. 3: **dužník > *dužnîk* as **právda > prâvda, *bòb > bȍb* as **ràk > rȁk, *nārȍd > *nārȍd.*

8. Same stress shift as in No. 4: **dužnîk > dùžnīk, *nārȍd > národ.* Notice, *ī* is still long.

SUMMARY II: **The acute or rising intonations in Slovene**

1. The old-acute: ◌̏ shortens as in SC: **rȃkъ > *ràkъ, *lîpa > *lìpa* merging with ◌̀ of **nārȍdъ*, etc.

2. ◌̀ > ◌̂ in an internal syllable after a weak jer is lost: **prȃvьda > *pràvьda > prâvda, *bîtъka > *bìtъka > bîtka* but **čȃsъ > *čàsъ > *čàs* without change because ◌̀ is in a final syllable. Note, the nature of the consonant after the vowel is not a factor. Both SC and Sln have *prâvda* vs SC *bîtka.* There are no grounds to posit an intermediate stage for Sln as in SC whereby **pràvьda > *právda* then, later *prâvda.*

3. ◌̀ in final syllables shifts to left if the preceding vowel is long: **nārȍd > národ, *trōbà > tróba* but not in **kožùh, *ženà* because the preceding vowel is short, or in **malìna, *kožùha* because *ì* or *ù* are not final.

4. ◌̀ relengthens in a nonfinal syllable, that is, becomes long rising (◌́): **narȍda > narọ́da, *kožùha > kožúha, *malìna > malína* but **bràt* does not lengthen. This ◌́ merges with ◌́ of other sources such as neo-acute.

5. ◌̀ > ◌̏ in final syllables: **bràt > brȁt, *məglà > məglȁ.*

6. The neo-acute: As in SC, new rising pitch may be either long ◌́ or short ◌̀. It arose after process No. 1.

7. ◌́ remains distinct but new ◌̀ > ◌́ in an internal syllable after a weak jer is lost. Elsewhere new ◌̀ merges with old ◌̀ < ◌̏ (process No. 1): **dъlžьnikъ*

> *dolžník, *kǫtъ > kọ́t, *bobъ > *bòb, *dvorъ > *dvòr* as **ràk, *nāròd, *malìna*, but **dvorьskъ > dvọ́rski, *ženьskъ > žę́nski.* Note, old ˋ in the same environment gives ˆ (process No. 2). There are also a few examples of new ˋ > ´ in the final syllables in genitive plural: **gorъ > gọ́r; *konь > kọ́nj* vs ** dvorъ > dvòr* (nom. sing.)

8. ˋ shifts to left (as in process No. 3) but only to a preceding short vowel except *ə*: **gorà > góra, *kožùh > kóžuh.* The newly stressed vowel receives ´ merging with ´ by processes in Nos. 3, 4, 6, 7.

9. ˋ > ̏ as in No. 5: **bòb > bòb, *kònj > kònj* as **ràk > ràk.*

SUMMARY III: **The old circumflex in Serbo-Croatian**

1. ˆ remains ˆ in forms of less than two syllables

2. ˆ > ̏ in forms of three syllables or more: **sv̂nъ > sîn* but **sv̂nove > sînovi, *vȏlkъ, *vȏlci > vûk, vûci* vs *vùkovi.*

3. ̏ > ˆ after a weak jer is lost: **mèdъ > mêd, *nòsъ > nôs, *dь̀nь > dân, *dòmъ > dôm* but *dòmu* if there is no lost of *ъ, ь*. Both ˆ and ̏ merge with later ˆ and ̏ (see Summary I, No. 3).

SUMMARY IV: **The circumflexes in Slovene**

1. ̏ > ˆ after a weak jer is lost as in SC: **nȏčъ > nọ̑č, *kòstъ > kọ̑st, *pèčъ > pę̑č.*

2. Every ̏ and ˆ shifts one syllable to the right: **mȍr'e > morję̑, *slòvo > slovọ̑, *mę̑so > mesọ̑, *mǫ̑ža > možâ, *gòrǫ > gorọ̑, *nâ gorǫ > na gọ̑ro.* Note, the vowel newly stressed is long and falling.

3. New ˆ arises for a variety of reasons. It does not undergo the shift of the process in No. 2.

The Czech and Slovak region. One very ancient dialectal division between Cz and Slk is that Slk shortens all acute vowels whereas Cz does not. In Cz old acute is reflected as length in an initial syllable, but only in forms containing no more than two syllables. Again, as is the case with SC, two syllables must be understood in the PSl sense by counting those syllables lost by contraction or by loss of a weak jer. Examples are:

**lípa* > Cz *lípa*, Slk *lipa*
**rắna* > Cz *rána*, Slk *rana*
**sőlma* > Cz *sláma*, Slk *slama* but the circumflex vowels shorten in both Cz and Slk:
**sv̂nъ* > Cz, Slk *syn*
**rę̑dъ* > Cz *řad*, Slk *rad*
**sôldъ* > Cz, Slk *slad*
**vőrna* > Cz *vrána* but **vőrnojǫ* > *vranou* vs Slk *vrana* and *vranou*
**sîla* > Cz *síla* but **sîlojǫ* > *silou, *sîlьnъjь* > *silný* vs Slk *sila*

**vě̄ra* > Cz *víra* but **vě̄riti* > *věřiti*; Slk has *viera* with *ie* from a long vowel (Cz borrowing?) but also *vera* as an exclamation 'honest to God'.

Since in Cz the addition of any ending over one syllable would cause a long acute vowel in the root to shorten, it is clear that the declension of any former type-a noun will necessarily bring about a quantitative alternation within the root. We have already seen this in the examples: *síla, vrána* vs *silou, vranou* since *ou* < *ū* < *ojǫ*. For the same reason we have a short root vowel in *silami, vranami* (instr. plural); *silám, vranám* (dat. plural) and *silách, vranách* (loc. plural). In modern Cz this type of alternation, although still well attested, has for the most part been eliminated by generalizing either length or brevity (more common) in all forms of the paradigm.

This explains why we now find many forms with a short root vowel whereas the comparative evidence would tell us rather to expect length from an old acute. The data from Old Cz and the dialects, however, confirm that most of these apparent deviations did in fact have the expected length but later lost it. Thus, modern Cz *čas, had, hněv, pleva, ryba, saze, žito* and many others all had long root vowels in Old Cz. We see this loss of length most frequently in forms subject to the long—short alternation still found in *síla - silou*. On the other hand, there are also examples like *dým* or *bříza* where length has been generalized in every form.

There also exists a type of compromise whereby length is retained only in a closed syllable. In modern Cz, for instance, we find *náš, váš* vs *naše, vaše, naši, vaši, našeho, vašeho* but Old Cz retained *á* in the dissyllabic forms like *náše, váše* and had short *a* only in *našeho, našemu*, etc. where the ending contained more than one syllable. Other examples are modern Cz *chléb - chleba, hrách - hrachu, mráz - mrazu, vítr - větru* as opposed to Old Cz where length was retained wherever the ending was monosyllabic.

The competition between long vs short root vowels has occasionally been resolved by having each form acquire a distinct difference in meaning. For example, *bába* 'old lady, granny' vs *baba* 'effeminate man, coward'; *místo* 'place' vs *město* 'city', or *houba* 'mushroom' where *ou* < *ú* vs *huba* 'mouth' whereas Slk has *huba* in both meanings.

Upper Lusatian. The contrast between acute and circumflex is recoverable only in the reflexes of the *tort*-formula forms. Acute is reflected as length; circumflex, as brevity. Because of later developments the presence of length as an indicator of acute is reliable only in an open syllable; therefore, masculine examples are cited in the genitive singular.

**vő̄rna* (> **vrōna*) > *wróna* vs *hroda* < **gôrda*
**bě̄rza* (> **brēza*) > *břēza* vs *brjoha* (< **br'ega*) < **bêrga*
**kő̄lda* (> **klōda*) > *kłóda* vs *złoto* < **zôlto*

**dőrga* (> **drōga*) > *dróha* vs *wroha* < **vôrga*
**bĕrmę* (> **brēm'e*) > *brĕmjo* vs *drjewo* < **dêrvo*

ĕ and *ó* can also be the result of neo-acute, compensatory lengthening, or the preservation of prestressed length.

The East Slavic region. As in UL, the contrast between acute and circumflex is seen only in the reflexes of *tort*-formula forms. Acute forms are stressed on the second vowel of the pleophonic form; circumflex, on the first vowel. Let us compare some examples from R with Cz, SC and UL.

PSl		*R*	*Cz*	*SC*	*UL*
vőrna	>	voróna	vrána	vrȁna	wróna
gôrdъ	>	górod	hrad	grâd	hrod-a
bĕrza	>	ber'oza	bříza	brèza	bĕza
bêrgъ	>	bèreg	břeh	brêg	brjoh-a
kőlda	>	kolóda	kláda	klȁda	kłóda
zôlto	>	zóloto	zlato	zlâto	złoto
dőrga	>	doróga	dráha	drȁha	dróha
vôrgъ	>	vórog	vrah	vrâg	wroh-a
mőrzъ	>	moróz	mráz	mrȁz	mróz-a

In the R Leka dialects, old acute (as well as neo-acute) is reflected as *ô*, as in *morôz, kolôda, vorôna, dorôga.*[3] These dialects, however, in many instances have *ô* beyond the *tort*-formula in such forms as *mnôgo* < **mъnògo, gotôvo* < **gotòvo* where *ô* continues the old short rising.

Bulgarian. Here we find a phenomenon reminiscent of Sln in that formerly circumflexed vowels shift their stress one syllable forward. Since Blg lost intonations long ago, we will follow the usual practice of marking stress with ˋ.

**sẽno* > *senò, *tẽsto* > *testò, *mę̑so* > *mesò* (Sln *senọ̑, testọ̑, mesọ̑*)

With masculines this shift becomes evident only when the definite article is added.

**glâsъ* + *tъ* > *glasə̀t, *rògъ* + *tъ* > *rogə̀t, *nòsъ* + *tъ* > *nosə̀t*

On closer examination, however, the similarity of this shift with that of Sln is more apparent than real. We do not find in Blg as in Sln an automatic shift from every circumflexed vowel. The present situation in Blg has its origin in an accentological feature of PSl already described. This is, namely, the fact that forms with type-*c* stress (that is, with circumflex pitch on a root vowel) shift the stress from the root onto an adjacent preposition, particle, prefix or suffix. (See p. 190, No. 4.) The old demonstrative pronouns which came to be used as a definite article

[3] In R dialectology *ô* indicates a vowel higher and more rounded than the stressed *o* of literary R.

caused this type of shift. The stress, therefore, moved as far to the right as possible. Thus, **vôlkъ + tъ > *vьlkъtъ > *vьlkъtъ*, and hence in modern Blg we have *vəlk* and *vəlkət*, but the nominative plural **vôlci > vəlci* without change in the position of stress as opposed to Sln *volcjȇ*. Similarly we have **gôrdъ > *grâdъ + tъ > *gradъtъ > gradət* in the modern language but *dva gràda* (remnant of the dual).

The examples cited above (**sȇno*, etc.) have their final stress because in this type of neuter nouns the stress in the singular has been generalized from the form with the definite postpositive article, that is, **mę̑so + to > *mę̑sotò* and later *mesòto* in modern Blg. Similarly in masculine nouns of the type *sinovè < *sȳnove* or feminines like *bradî < *brâdy*, the final stress has been generalized from that of the definite article, *sinovète, bradîte*. One assumes here an intermediate stage with stress on the article itself, that is, **sinovetè, *braditè*, etc., which are for the most part now lost, but are no mere theoretical construct. Some are still found in the dialects: *nebetò, sərcetò, rəcetè*.

Thus, in such Blg forms as *èzero, gələb, pèpel, grèben*, or *kòren* there is no progressive shift as in Sln *jezȇro, pepȇl, grebȇn* or *korȇn*, and these data are perfectly consistent with the historical accentology of both languages. However, a problem does arise in Blg when the definite article is suffixed. Here one would expect a stress shift onto the final jer in forms like **gòlǫbъ + tъ > *golǫbъtъ* exactly as in **vôlkъ + tъ > *vьlkъtъ*, but such is generally not the case. Thus, we find *èzeroto, gələbət, pèpelət, grèbenət*, not the expected **ezeròto* and so on. There are, however, a few counterexamples such as *vèčer* vs *večertà, brašnòto*, and *sərcè*, but these are rare. The first example is, in any event, not reliable, for it now belongs to a declensional type (feminine ending in consonant) in which the singular article is always stressed.

One is reminded here of the situation encountered in Cz and SC whereby contrasts in quantity and/or pitch were neutralized in forms over two syllables in length. This would explain why forms like *dèver, dèverət* and *sèver, sèverət* both belong to the same stress class now whereas the evidence indicated that originally the former belonged to the type-*c* stress pattern and the latter to type-*a*. In Sln, therefore, are attested *devêr < *dȇverъ* vs *séver < *sẽverъ* but in SC *dȅvēr* and *sȅvēr* in which the originally stressed vowels retained this feature but are identical in quantity and pitch. The same would apply to all the examples cited in the preceding paragraph assuming that in early Proto-Bulgarian (or in parts thereof) the falling pitch of **kòrenъ* and the rising pitch of **kãmenъ* ceased to contrast. That is, they were neutralized in such a way that all the formerly circumflexed vowels merge with the formerly acute vowels and thereafter develop identically with the latter.

Any explanation based on neutralization of pitch and/or quantity in forms over two syllables may be quite tempting but cannot be accepted without reservation or clarification. Obviously the situation was not identical with that of SC as, for example, in *sîn < *sȳnъ* vs *sînovi < *sȳnove*. If the same thing had occurred in

Blg, there would be no explanation for stress shifts of the type *sinovète* < **sȳnove* + *tě*. If any neutralizations ever occurred in this region of Slavic, the conditions were somehow different from those applying in SC, some of which may well be morphologically rather than phonologically conditioned.

The problem is further compounded by the fact that we have little or no idea regarding the prosodic features in Blg at the time when the postpositive article was developing. All we know for certain is that dissyllabic forms (and under certain condition also multisyllabic) develop different stress patterns, depending on the PSl intonation of the root vowels as in **čę̌do* + *to* > *čèdoto* as opposed to **mę̑so* + *to* > (**męsotò*) > *mesòto*. Had all distinctions of intonation and/or length been lost, it is difficult to see why such would not merge.

The rise of neo-acute. Neo-acute or new rising pitch is the name given to a phenomenon of Late PSl whereby a stress shift gives rise to both a new intonation and lengthening of the vowel with this intonation.

The neo-acute arose in Late PSl when jers in weak position lost their ability to bear stress. This was undoubtedly the first step toward their later disappearance. The formerly stressed jers in this position shifted their stress to the preceding syllable, and newly stressed vowel was lengthened and received a rising intonation. In the modern Slavic languages, therefore, we can expect to find the reflexes of neo-acute in any form if in the following syllable there are grounds for positing a stressed weak jer.

The reflexes of neo-acute are as follows:

1. CZECH, SLOVAK: Neo-acute is reflected as a long vowel merging with length of any other source.

2. POLISH: The situation was the same as in Cz and Slk until ca fifteenth century. In literary P length is discernible only with *ę̄* > *'ą*, *ǭ* > *ą and* *ō* > *u* (written *ó*), but the dialects also have *ē* > *ė*, *ā* > *å* and Kashubian has distinct reflexes for *ū* vs *ŭ*, *ī* vs *ĭ*.

3. UPPER LUSATION: The lack of early documentation obscures the original picture, for all quantitative and intonational difference have disappeared except for the reflexes of lengthened *o*, *e*, and strong *ъ*, *ь*, in initial syllables that is, *ō*, *ъ̄* > *ó*; *ē*, *ь̄* > *ě*. On the other hand, *ó* and *ě* have sources other than neo-acute.

4. SLOVENE: The short vowels (*e*, *o*, strong *ъ*, *ь*), subject to neo-acute lengthening, merge with the long neo-acute in internal syllables after the loss of a weak jer. Elsewhere they merge with the old acute and develop identically with them. The reflex of neo-acute for all other vowels is long rising intonation in all environments. Old acute vowels now show the same intonation if they underwent a later relengthening. Neo-acute of originally long vowels also differs in that it was not subject to certain shortenings and stress shifts as was the old acute. Only a few genitive plurals with the zero ending from *ъ*, *ь* have a short root vowel showing neo-acute lengthening in a final syllable. See Summary II, Nos. 6-10.

5. SERBO-CROATIAN: Neo-acute on *o, e*, strong *ъ* and *ъ* is reflected as a short falling vowel (—̏), thus merging with the original acute. On all other vowels neo-acute is reflected as a long falling (—̂), thus merging with the original circumflex. Fortunately for Slavic historical linguistics certain dialects of SC preserve neo-acute as a separate and distinct long rising intonation. These are: (1) Čakavian for which the symbol —́ is used to mark neo-acute; (2) certain Štokavian dialects of eastern Slavonia for which the symbol —̏ is used. See Summary I, Nos. 5-8.

6. RUSSIAN: Neo-acute is reflected only dialectally and only with lengthened *o* indicated either as *ô* or ω (a rounded back vowel, higher and tenser than stressed *o* of standard R). These dialects are scattered throughout R ethnic territory (mainly in the north) but are all referred to as Leka-type dialects.

Since we may expect the reflexes of neo-acute whenever there are grounds for assuming a shift of stress from a weak jer to the preceding syllable, one good source of examples would be nouns belonging to the type-*b* stress pattern where the ending was often a stressed jer. This archaic stress type lives on in modern R in nouns like *dolžnik - dolžnikà* in which the vowel of the ending still bears the stress in all instances except where the weakening and loss of a jer has forced the stress to shift one syllable to the left. The vowel receiving this stress will then show neo-acute length and/or pitch wherever these features are preserved. That is, R *dolžnik* corresponds directly to Cz *dlužník*, Slk *dlžník*, Sln *dolžník*, SC *dùžnīk* — all derived from **dъlžьníkъ* < **dъlžьnikъ*. SC shows the expected stress retraction but retension of length of *ī*; however, some dialects still have stress of the type *dužnîk* without retraction but with the expected —́ > —̂. The Čakavian dialect (NW SC) retains both the original long rising pitch and the original position of stress in all forms such as *dužník - dužnīkà* (gen. sing.) with *ī* retained in prestressed position. This is the origin of *í* in both SC *dužníka* and Sln *dolžníka* which was already long before shifts in stress brought about rising pitch. The *í* of Cz *dlužníka*, Slk *dlžníka* is analogous to *ī* of SC *dùžnīk* in that the loss of stress by a long vowel did not result in its shortening.

For further emphasis we may cite several nouns which in R belong to the same stress pattern as *dolžnik* and show neo-acute elsewhere, demonstrating that they all belonged to PSl type-*b* stress, that is, **sǫdъ* > **sǫ́dъ* and so on with all the examples.

R	sud	kut	ključ	grex	put'	koról'	pryšč	xlev	plašč	rukáv
Slk	súd	kút	kľúč	hriech	pút	král'	prýšt'	chliev	plášt'	rukáv
Cz	soud	kout	klíč	hřích	pout'	král	—	chlév	plášt'	rukáv
Sln	sọ́d	kọ́t	ključ	gréh	pọ́t	králj	príšč	hlẹ́v	pláščˇ	rokáv
SC	sûd	kût	ključ	grêh	pût	krâlj	prîšt	hlêv	plâšt	rùkāv

Čakavian also supports this evidence with *súd, kút, kljúč, grîh, králj*, etc., and P has *sąd, kąt, król* (*ą* < *ǭ*, *ó* < *ō*) and dialectally *grzèch, chlèv, rękåw* (*è* < *ē*, *å* < *ā*).

It would be wrong to leave the impression that such comparisons will agree without fail. Individual lexical items can shift from one stress type to another for reason too complicated to discuss here or often for no apparent reason at all. For example, R *kožùx - kožuxà* is obviously new; nowhere else we do find any evidence for assigning this noun to the type-*b* pattern. Rather, the data indicate a fixed stress with old acute on the second syllable, that is, *kožúxъ* (type-*a*). The Ukr *kožùx - kožuxa* is, therefore, an archaism. On the other hand, R and Ukr *xomùt - xomutà* is supported by Slk *chomút*, Cz *chomout* and P *chomąto* (with a later gender change) but contradicted by SC *hòmūt* and Sln *homôt*. These data tell us to reconstruct **xòmǫtъ* (type-*c*) for the SC—Sln region but **xomǫ́tъ* < **xomǫtъ* (type-*b*) for the rest of Slavic including likely Blg *xomòt*. This may be somewhat confusing if not frustrating for investigators but hardly unusual in this field; competing accentuations are a commonplace even in a highly standardized language like modern R. For example, *korotko* can be stressed on any one of three syllables, and such examples can be multiplied tenfold if dialectal and so-called substandard forms are considered. There is every reason to assume that such accentual doublets (or triplets?) also existed in Late PSl and in ever increasing number as the language disintegrated.

Other sources of neo-acute. Having established that neo-acute can, in general, be attributed to stress shifts from a weak jer, it is now necessary to indicate some additional sources of this phenomenon, not directly connected with the loss of the *jers* but, nevertheless, with other stress shifts.

The major categories are the following:

1. Verbs of the type **pytàjǫ, *pytàješь*, etc. in the present. Neo-acute in these verbs occurs only in those languages which undergo contraction of the type VjV > V̄. The long vowel resulting from such a contraction could have either rising or falling intonation depending on the position of the stress before contraction took place. If stress were on the second vowel, rising pitch was the result; if on the first vowel, falling pitch. Thus, **pòjasъ* > **pâsъ* > Sln *pâs* vs **stojàlъ* > **stálъ* > Sln *stál* — a pitch merging with neo-acute.

Therefore, in verbs stressed like **pytàjǫ, *pytàješь*, we would expect contraction to produce falling pitch, but reconstructed stress patterns of PSl indicate that falling pitch can exist only in an initial syllable. Therefore, a stress shift took place which produced neo-acute in the preceding syllable.

**pytàješi* (> **pytâši*) > **pýtāšь*: SC *pîtāš* (Čakavian *pítāš*), Slk *pýtaš*
**měšàješi* (> **měšâši*) > **měšāšь*: SC *mêšāš*, Sln *mẹ́šaš*, Slk *miešaš*, Cz *mícháš*

**stǫpȁješi* (> **stǫpâši*) > **stǫ́pāšь*: SC *stûpāš*, Sln *stópaš*, Slk *stúpaš*, Cz *stoupáš* (*ou* < *ú*), P *stąpasz* (*ą* < *ǫ́*).

2. Verbs of type-*b* stress in the present. For reasons not exactly clear, the stress is shifted from the theme vowel to the root producing neo-acute in that syllable. This originally affected all persons except the first person singular. This type of stress is still well preserved in R in such forms as *mogù* but *mòžet, pišù* but *pȉšet, služù* but *slùžit, nošù* but *nòsit.*

**pišèši* > **píšeši*: Cz, Slk, Sln *píšeš*, SC *pîšēš*
**vęžèši* > **vę́žeši*: Cz *vážeš*, Slk *viažeš*, SC *vêžēš*, Sln *vę́žeš*, P *wiążesz*
**služȉši* > **slúžiši*: Cz *slouží́š*, Slk *slúžiš*, SC *slûžīš*, Sln *slúžiš*
but **nosȉši* > **nósiši*: Cz, Slk *nosíš*, Sln *nǫ́siš*, R (Leka) *nôsiš*, SC *nȍsīš.*

It will be noted that the R Leka dialects are the only ones in Slavic which retain neo-acute length (marked as ◌̂) on short vowels (*môžeš, nôsiš, prôsiš*)[3]. Slk and Cz have some few remnants (*môžeš, můžeš* and *stůněš*) but in the vast majority of cases length is eliminated or failed to develop on *e, o*. Length in such P verbs as *młócisz, kłócisz, wrócisz* do not contradict this general pattern. These are *tort*-formula forms and the vowel + *r, l* is treated as a long (diphthongal) segment, thus, **moltiši* > **móltiši* > *młócisz*, exactly as **vęžèši* > **vę́žeši* > *wiążesz.*

In the vast majority of instances the neo-acute length of all the other persons except the first singular has been analogically extended to that form as well. Cz still has *mohu* vs *můžeš* but Slk has *môžem, môžeš*. Thus, we find length in the first person in SC *slûžīm*, Sln *slúžim*, Cz *slouží́m*, Slk *slúžim.*

3. The definite or pronominal form of type-*b* (and some type-*c*) adjectives. This means that if an adjective in its indefinite (nominal) forms is stressed according to type-*b*, it will have root stressed in the definite form. The root vowel will receive neo-acute intonation.

	*Nominal (type-*b*)*	*Pronominal*			*Cz*	*Slk*	*Sln*	*SC*
M.	**bělъ*	**bělъjь*	>	**bě́lъjь*	bílý	biely	bę́li	bêlī
F.	**bělá*	**bělája*	>	**bě́laja*	bílá	biela	bę́la	bêlā
N.	**bělò*	**belòje*	>	**bě́loje*	bílé	biele	bę́lo	bêlō

NOTE: the R *bel, belà, belò* (newer *bèlo*) but *bèlyj, bèlaja, bèloe.*

As with verbs, the lengthening of a short root is seen only in R Leka dialects: *môkraj, gôlaj* but Cz and Slk *mokrý, holý*. The P *szósty* < **šēstъjь, siódmy* < **s'ēdmъjь, ósmy* < **ōsmъjь* could be either remnants or analogical extensions of this type of lengthening of short vowels.

Adjectives that were stressed according to type-*c* in the nominal form show a great vacillation in the pronominal form. Sometimes we find a development identical to that of the type-*b* adjectives — that is, neo-acute on the root vowel.

Sometimes we find type-*b* stress in the pronominal form whithout any lengthening of the root vowel. Note the two possibilities:

	Nominal (type-c)	*Pronominal*		*Nominal (type-c)*	*Pronominal*	
M.	**mȏdrъ*	**mǫdrъjь* >	**mǫ́drъjь*	**skǭpъ*	**skǫpъjь* >	**skǫ́pъjь or* skǫpȅjь
F.	**mǫdrà*	**mǫdraja* >	**mǫ́draja*	**skǫpà*	**skǫpaja* >	**skǫ́paja or* skǫpȁja
F.	**mȏdro*	**mǫdroje* >	**mǫ́droje*	**skǭpo*	**skǫpoje* >	**skǫ́poje or* skǫpõje

Again note the R *mudr, mudrà, mùdro* but *mùdryj, mùdraja, mùdroe* as opposed to *skup, skupà, skùpo* but *skupòj, skupàja, skupòe*, also Ukr *skupýj, skupà*, etc., Br *skupý, skupàja.* The root stress of R *mùdryj* agrees with what we find elsewhere, that is, the expected reflex of neo-acute: Cz *moudrý*, Slk *múdry*, P *mądry*, SC *mûdrī*, Sln *mǫ́dri.* On the other hand, Cz *skoupý*, Slk *skúpy*, P *skąpy*, SC *skûpī* all point back to neo-acute length whereas the position of stress in E Sl would indicate the opposite. Sln *skópi* (with broad *o*) indicates a recent stress shift, thus, agrees with E Sl. There is simply no rule for type-*c* adjectives in their long forms. They will vacillate from region to region. Note the difference between R *tv'òrdyj, rodnòj* and Ukr *tverdýj, rídnyj.*

4. *Jotation,* especially in the *jā*-stems, often produces neo-acute lengthening of the syllable immediately preceding the *jotated* consonant.

**storgja* > **stórža*: Cz, Slk *stráž*, SC *strâža*, Sln *stráža*, P *stróża*

**prędja* > **prę́d'a*: Cz *příze*, Slk *priadza* with reflexes of long vowels, but P *przędza*, SC *prȅđa* indicate the absence of neo-acute. Sln *prę̑ja* has length but not one of neo-acute origin.

**žędja* > **žę́d'a*: Old Cz *žieze* (*ie* < *ę̄*), P *żądza*, Sln *žę́ja*, SC *žȅđa*, Čakavian *žéja* where all attested forms indicate neo-acute length.

Examples like **volja* > Cz *vůle*, Slk *vôl'a; *xodja* > Cz *chůze*, Slk *chôdza* are often included here but will be discussed in the next section.

The problem of neo-acute with *e, o* and strong *ъ, ь*. The evidence for neo-acute length on short vowels is not very strong in any area of Slavic with the possible exception of the Leka-type dialects of R where we have *nôž* vs *voz, môžeš* vs *mogù, prôsiš* vs *prošù*, etc. The mystery is that there is no corresponding development with any other vowel in forms with the identical stress patterns, not even with *e* which constitutes a front counterpart for *o*. The origin of *ô* in these dialects may have an entirely different explanation, and for many is still an unsolved problem.

Such rare Cz and Slk examples as *můžeš, môžeš* or Cz *stůněš* are very often interpreted as an archaic remnant of a pattern which engulfed all verbs formerly having type-*b* stress. This may be so, but it is strange that there are so few such remnants. It is more logical to propose that all type-*c* verbs underwent the same

stress shift but only a long root is subject to neo-acute lengthening. Thus, **vęžèši* > **vę́žeši* > Cz *vážeš*, Slk *viažeš* but **prosìši* > **pròsiši* without lengthening. The presence of *můžeš, môžeš* or similar rare examples is then best explained as a sporadic lengthening of a short root vowel by analogy to verbs with the same stress pattern but with a lengthened root vowel. Otherwise, we must assume an overall lengthening but the later and very consistent shortening of every *o, e* and the reflexes of *ъ, ь*. These would be early adjustments before the W Sl languages developed fixed stress.

The same considerations also apply to such rare examples as P *szósty, siódmy, ósmy*. Either we must assume that these are sporadic lengthenings of a short vowel (perhaps by analogy to the long vowels of *piąty, dziewiąty, dziesiąty*) or that every root *e, o* in pronominal adjectives of type-*b* stress was lengthened and later reshortened.

In both SC and Sln *e, o*, or the reflexes of strong *ъ, ь* with neo-acute intonation merge with the short rising intonation that resulted from the shortening of the old acute and thereafter both share the same developments. That is, the short rising of either origin finally develops to a short falling in the modern languages, for example, **bobъ* > **bòbъ* > SC, Sln *bȍb* exactly as **rǎkъ* > **ràkъ* > SC, Sln *rȁk*. Only in certain specific situations does Sln have a long rising intonation from a short neo-acute. These are in a limited number of genitive plural forms such as *kọ́nj, otrọ́k* and adjectives like *žẹ́nski, dvọ́rski* vs SC *žȅnskī, dvòrskī*.

Excluded here are Sln verbs like *nọ́sim, nọ́siš* or *čẹ́šem, čẹ́šeš*, for the long rising pitch is the result of a later lengthening of all nonfinal stressed vowels. They are exactly of the same origin as in *narọ́da* (gen. sing. of *národ*) or in *večérja* where no neo-acute ever existed. SC *nòsīm, nòsīš; čẽšēm, čẽšēš* all have the expected short falling in this type. Even the Čakavian dialects of SC which so accurately preserve a distinct rising pitch on long vowels has no corresponding pitch on short vowels. Thus, we find here *králj* vs *pȍp* where ˝ is the very same pitch as in *jȁma, rȉba* from the shortened old acute. SC also provides us with several examples of a normally weak jer developing as a strong one when it is in stress pattern that would produce a neo-acute on a long vowel, as with a verb of type-*b* stress. But even here the vowel < *ъ, ь* exhibits ˝ as if from a shortened old acute, thus, **tьrèši* > **tòreši* > *tȁrēš* vs **pišèši* > **píšeši* > *pȉšeš*.

It is often argued that the long vowels in forms of the type Cz *vůně, vůle, chůze* and Slk *vôňa, vôl'a, chôdza* are true examples of neo-acute lengthening brought about by *jotation* of the consonant preceding the vowel (**vonja, *volja, *xodja*). It is quite correct that neo-acute lengthening is often encountered before a *jotated* consonant, but the regularity of its appearance is much greater with long vowels than with short. For example, the reflexes of **žędja* (p. 202) show evidence for neo-acute lengthening everywhere except Slk where

the etymon is not attested at all. However, **prędja* does show neo-acute length in both Cz and Slk (p. 202) but not in P or SC.

In spite of the obvious parallelism between Cz *příze* < **prędja* and *chůze* < **xodja* (or between Slk *priadza* and *chôdza*), this comparison is deceptive. Lengthening involving *o* (or any other short vowel) in forms of this type are found only in Cz and Slk, and even here there are discrepancies, that is, **kozja* > Cz *kůže* vs Slk *koža,* or **nosja* > Cz *nůše* vs Slk *noša.* Elsewhere there is no evidence for this type of lengthening at all. Examples are: SC *vȍlja, kȍža, hòđa*; P *wola, nosze, chodza* (arch.). Modern literary Sln has *vólja, kóža, hója* and the like but this proves nothing, for all stressed nonfinal vowels lengthen in Sln. However, in dialects where long mid vowels diphthongize as in Lower Carniola, the reflexes (*kuọ̑ža, vuọ̑lja*) are diphthongs of a later origin, not from an original neo-acute. The Cz and Slk length in forms of this type is, therefore, of local origin and of limited scope. They represent an analogical extension of neo-acute lengthening usual for long vowels in the same environment.

Finally, it is often stated in the handbooks that the long vowel found in forms like P *nóż*, Cz *nůž*, Slk *nôž*, UL *nóž*, SC *nȏž* (but Sln *nȍž*) is an example of neo-acute lengthening of PSl *o*. It is quite true that PSl **nožъ* belonged to the type-*b* stress, with the final jer originally stressed; therefore, neo-acute of the root vowel is normally expected. The problem here is again one of regularity. Type-*b* nouns of the type **sǫdȍ, *kǫtȍ* or **grěxȍ*, with a long root vowel, consistently have (or had) neo-acute length everywhere (p. 196) whereas those like **nožȍ,* with a short root vowel, definitively do not. The SC *nȏž* is one of kind; in the vast majority of instances SC roots of this stress type have instead —̏, the normal reflex for both the shortened old acute and the neo-acute of short vowels. Sln also has the same reflex but only in final syllables. Let us now compare two type-*b* nouns: **bobȍ* > SC, Sln *bȍb*, Cz *bob*, Slk *bôb*, P *bób*, vs **snopȍ* > SC, Sln *snȏp*, Cz, Slk, P *snop*. Where we contrast these with the consistent appearance of length in **kǫtȍ*, it is evident that the sporadic lengthening or lack thereof in **nožȍ, *bobȍ* or **snopȍ* cannot be explained as neo-acute. Obviously, the mere fact of a stress retraction from a jer (as in **snopȍ* > **snòpъ*) does not automatically lengthen *o* (or *e, ъ, ь*) as it does in the case of a long vowel. Yet, some short vowels do in fact lengthen in this environment, but as we shall see later this lengthening is caused not by a stress retraction but by the later loss of any weak jer (whether formerly stressed or not) and is known as compensatory lengthening to be discussed below (pp. 215-21).

In summary, the assumption that neo-acute lengthening affects short vowels as well as long ones produces more problems than it solves. Firstly, we would have to posit an overall lengthening in all type-*b* nouns like **snopȍ* > **snópъ* and in all verbs and adjectives of the type **nósiši* and **dóbrъjь*. Secondly, we must then posit an overall but apparently unmotivated shortening in these very same forms almost immediately thereafter. Forms like Cz *chůze, nůž, můžeš* would then be viewed as retensions of neo-acute *o*, but these "remnants" can be explained only in terms of their conforming to a pattern existing with the long vowels, but this ex-

planation only complicates the situation. If *o* in **nósiši* or **prósiši* is now phonologically long, it would not differ functionally from any other long vowel. How then would speakers be able to shorten *é* or *ó* but not *í* or *ę́* simply on the basis that *e* and *o* before lengthening used to be inherently shorter than other vowels but at a time now past? On the other hand, the inherent brevity of *e, o, ъ, ь* can readily explain their resistance to lengthening in the first instance but not their supposed reshortening once this inherent brevity is lost. If, however, we assume no neo-acute lengthening of these vowels, then forms like the Cz ones cited above would be later analogical lengthenings of a short vowel in forms with a stress pattern where length was more usual.

The neo-circumflex. The concept of new circumflex intonation is quite different from that of neo-acute. Nowhere in Slavic do we find a separate and distinct type of intonation which can be labelled neo-circumflex. Rather it is the name we give to those instances where we find the reflex of circumflex intonation instead of an expected acute. Unlike neo-acute, neo-circumflex is not a widely attested phenomenon. The greatest number of examples of it occur in Sln and the contiguous Kajkavian and NW Čakavian dialects of SC, but even here, in this relatively small area, the scope of neo-circumflex phenomena is not identical. There are also instances of the so-called neo-circumflex in Cz and standard SC, but here the phenomenon is limited to specific grammatical categories as the genitive plural of type-*a* nouns. It affects the vowel in the last syllable preceding the original *-ъ* or *-ь*-ending and seems, therefore, to be morphologically conditioned in these two languages, but the same is in large part true of Sln where many instances of neo-circumflex seem to be of morphological origin.

The tendency to differentiate the genitive plural by assigning to the last stem vowel a different length and/or pitch from that which it has in the other cases is well attested elsewhere in the Slavic world. It is very probable that the impetus for this differentiation originated with the *ŏ-* and *jŏ*-stem masculine nouns where by reason of other phonological processes the nominative singular and the genitive plural had become homophonous. That is, in type-*a* nouns the nominative singular and genitive plural is **rękъ* with root stress; in type-*b* nouns like **grěxъ* both cases had desinential stress, but in type-*c* nouns **zǫ̂bъ* (nom.sing.) vs **zǫbь* (gen. plural) there still existed a contrast in the position of the stress. Later this will be transformed into an intonational contrast, that is,**zǫ̂bъ* (circumflex) vs**zǫ́bъ* (neo-acute). In this way there came into existence a pattern whereby the root in the genitive plural had an intonation different from that in other case forms. For type-*a* nouns with rising pitch (old acute) in the nominative singular, the solution was to have a falling pitch in the genitive plural. The same process was later extended analogically to include all other nouns both feminine and neuter with type-*a* stress in which the genitive plural ending was *-ъ* or *-ь*. When referring to this type of falling pitch, the use of the term neo-circumflex is more to emphasize the fact that it arose later in place of a rising (acute) pitch than to indicate that it is a new

intonation quite distinct from the old or original circumflex.

In Cz, for example, we often find a short vowel in the genitive plural of nouns (both feminine and neuter) belonging originally to the type-*a* stress pattern, that is, where the root vowel had acute pitch. Thus, in modern Cz length in the nominative singular of such forms as *kráva, síla, míra, léto* or *dílo* is reflected as brevity — *krav, sil, měr, let, děl* in the genitive plural. In Cz, however, as we have seen, old acute length is not expected to shorten in forms containing less than three syllables. There is no apparent phonetic reason why, for example, a root vowel should shorten in **sīlъ* > *sil* (gen. plural) but remain long in **sȳrъ* > *sýr* (nom. sing.). This means that in the genitive plural of these forms we have brevity (the reflex of circumflex pitch) where normally length (the reflex of acute) would be expected, but this does not necessarily mean that we are dealing with a new, distinct and different pitch. It may have been rather a shift in intonations from old acute to old circumflex (**sīla* vs **sīlъ*). Whatever may have been the situation as regards the precise intonational nature of this new circumflex, it seems clear that it is of morphological origin.

In SC where all acute vowels shorten, we would expect to find a short stem vowel in both the nominative singular and genitive plural of all nouns with type-*a* stress. This is precisely what we have in the nominative of *krȁva, sȉla, mȅra, lȅto, dȅlo* (exactly as length is expected in Cz), but in the genitive we have *krâvā, sīlā, lêtā*, etc. (*ā* in this case is a later development of uncertain origin). The point is that once again we find the reflex of an old circumflex where an acute is expected. However, the so-called neo-circumflex of *krâvā* < **krāvъ* in no way differs from an original circumflex in *dâr* < **dārъ*.

Only in Sln it is possible to distinguish an original circumflex from a neo-circumflex. As indicated elsewhere, in Sln an original circumflex is subject to a progressive shift in stress; the neo-circumflex is not. Both, however, are reflected as long falling intonations. This means that any such intonation in an initial syllable as in *mẹ̑sec* (instead of, say, **mesêc*) is proof of a neo-circumflex. The long falling intonation of *golọ̑b* is, however, a somewhat different problem. Here we are obliged to seek further evidence by going to other Slavic languages. The R *gòlub'* and SC *gòlūb* indicate that originally the stress was on the initial syllable. Therefore, the Sln *golọ̑b* is the result of a stress shift — that is, an original or old circumflex. Stated in another way, *î* in Sln *nosîla* can be an old circumflex only if it is the result of a stress shift from the preceding syllable. SC *nòsila* and R *nosíla*, however, indicate otherwise and, therefore, we are dealing with a neo-circumflex. In other words, it is impossible to posit a PSl **nôsila*. If such were the case, then Sln *nosîla* would be simply another example of the regular Sln progressive stress shift where original circumflexes are involved.

The question now arises as to the conditions under which neo-circumflex arose in Sln. As mentioned, many instances of neo-circumflex are morphologically conditioned but some, at least, are of phonological origin. It is generally

accepted that there are two sets of conditions under which a new falling pitch may arise in Sln.

1. An acute (i.e. stressed) vowel in a nonfinal syllable acquires neo-circumflex if a weak jer is lost in the following syllable. Given that all long acute vowels shortened at a very early date in both SC and Sln, it is likely that these vowels would have had a short rising pitch when the jers were dropped.

**pràvъda* > *prâvda* (not **pravdâ*)
**sòlmъka* (> **slàmъka*) > *slâmka*
**lětьnikъ* > *lętnik* but **čьlovȅkъ* (> **človȅk*) > *človek*
**lìpьnikъ* > *lîpnik*, **bìtъka* > *bîtka*
**stàrъca* > *stârca* but **stàrъ* > *stȁr*

2. A stressed vowel acquires neo-circumflex if followed in the next syllable by any long vowel.

**mȅsēcь* > *męsec* (note poststressed length in SC *mèsēc*, Cz *měsíc*)
**lìpojǫ* (> **lìpō*) > *lîpo*
**stàrъjь* (> **stàrī*) > *stâri*

Other instances of circumflexing in Sln are either of morphological origin or a combination of phonological and morphological origin, and an investigation of their scope and occurrence more accurately belongs to the history of Sln itself. However, in order to give some idea of the complications involved in the neo-circumflex phenomenon, it may be worthwhile to cite one concrete example.

Neo-circumflex is attested in the locative plural of type-*a* nouns. That is, *râkih* where we would expect the root vowel to show the reflexes of an original acute as in such forms as *ráka* (gen. sing.), *ráku* (dat. sing.) or *ráki* (nom. plural). Why then should there be a neo-circumflex in the locative plural? The answer seems to lie in the ending itself. The original *ŏ*-stem (**-ěxъ*) and *jo*-stem (**-ixъ*) endings have been redistributed on the basis of stress. *-ę́h* < **-ěxъ* occurs when stressed; *-ih* < **-ixъ*, when unstressed, that is, *râkih* vs *možę́h*. The long rising unretracted stress of *-ę́h* indicates that we are dealing with a neo-acute intonation. This in turn seems to indicate that the ending in question generalized the form with a long vowel — either with neo-acute length (**zǫbě̋xъ* > **zǫbě́xъ*, **mǫžixъ* > **mǫžíxъ* of type-*c*) or with preservation of poststressed length (**čăsě̄xъ*, **plačīxъ* of type-*a*). On this basis, we may explain the neo-circumflex of *râkih* in two possible ways. The original form would develop as follows: **rȃcě̄xъ* (> **ràcě̄xъ*) > **râcěx* and finally, by morphological restructuring, *râkih*, or we may also postulate that the neo-circumflex arose only later, after the restructuring, that is, **ràkīx* > **râkīx* > *râkih*. Given the fact that we have neo-circumflex before a poststressed length as in **mȅ̄sēcь* > *męsec*, it is likely that the first explanation is preferable. In any event, both explanations are quite plausible.

The preservation of Proto-Slavic length. As described in Chapter VI, toward the end of the PSl the entire vowel system underwent a shift from quantitative to qualitative contrasts (that is, **nășŭ* vs **nāsŭ* > **nosъ* vs **nasъ*). Further in Chapter VI, it was stated that after the restructuring, the formerly long vowels remained inherently long for some time thereafter. Later this redundant length was eliminated in all but a few specific environments. The fact is that the instances of loss of length are much more numerous than instances of its retension. Therefore, it is easier to define those environments where length is retained. These are:

1. STRESSED VOWELS: These have already been described in the discussion of the reflexes of PSl intonations. Therefore, only a brief summary is necessary.

— Cz: acute vowels in initial syllable in forms under two syllables, **sĭla* > *síla* vs *silou* < **sĭlojǫ*
— SC: circumflex vowels in initial syllable in forms under two syllables, **gôrdъ* > *grâd* vs *gràdovi*
— Sln: circumflex with forward shift, **gôrdъ* > *grâd, gradû.* The old acute is now long rising in all but final syllables, *bráta* vs *brȁt* but this is the result of later relengthening.

2. PRESTRESSED VOWELS:

— In dissyllabics of type-*b* stress where the root vowel is always in prestressed position. Here length is preserved in all languages capable of showing length.

**trāvà* > Cz, Slk, SC, Sln *tráva.*
**sǭdà* (gen. of **sǫdъ*) > Cz *soud*, Slk *súd*, P *sąd*, SC *sûd*, Sln *sọ́d.*

— In dissyllabics of type-*c* stress where the root vowel is in prestressed position only in some forms, length is retained only in SC but not in other regions.

N.	**rǭkà*	>	SC *rúka* but Cz, Slk *ruka*, Sln *róka*
A.	**rǫ̂kǫ*	>	SC *rûku* but Cz, Slk *ruku*, Sln *rokǫ̂*
N.	**zīmà*	>	SC *zíma*, Cz, Slk *zima*, Sln *zíma*
A.	**zîmǫ*	>	SC *zîmu*, Cz, Slk *zimu*, Sln *zimǫ̂*
N.	**grędà*	>	SC *gréda*, Cz *hřada*, Slk *hrada*, Sln *gréda*, P *grzęda*
A.	**grędǫ*	>	SC *grêdu*, Cz *hřadu*, Slk *hradu*, Sln *gredǫ̂*, P *grzędę*

The Sln data seem at first glance to indicate that here too we have preservation of prestressed length, for we now have *róka, zíma, gréda.* The problem here lies in the fact that Sln underwent two stress retractions separated in time by some three centuries. The first retraction shifts the stress from a short vowel to a long one; the second retraction, from short to short. Thus, **trāvà* > *tráva* is older than **sĕstrà* > *séstra.* The newly stressed vowel is long in both instances, but there is a difference in the quality of *e* (< *e, ě, ę*) and *o* (< *o, ǫ*) but not of other vowels. If

the newly stressed *e, o* were long at the time of the first stress retraction they will be narrow (*é, ó*); if lengthened by the second retraction, they will be broad (*é, ó*, see pp. 30-1).

Type-*b*: with prestressed length retained, it belongs to the first retraction

N. **mǭkà* > *mǫ́ka*

A. **mǭkǫ̀* > *mǫ́ko*

Type-*c*: with prestressed length lost, it belongs to the second retraction

N. **rǭkà* > **rǫ̆kà* > *róka*

A. **rôkǫ* > **rǫ̆kǫ̂*

Note the R *mukà, mukù* vs *rukà, rùku* and also the P *mąka* (*ą̄* < *ǭ*) vs *ręka* (*ę* < *ę̆*).

Forms like *zíma* are ambiguous, for we do not know the sequence of events: **zīmà* > **zĭmà* > *zíma* (relengthening) or **zīmà* > *zíma* (length never lost). All we know is that forms like *mǫ́ka* vs *róka* or *gréda* vs *bę́da* prove that Sln often shortened the root vowel of nouns in type-*c* stress as Cz, Slk or P.

— In trisyllabics we again find evidence of prestressed length being retained. This is quite consistently reflected in type-*a* and type-*b* forms but much less so with type-*c*.

Type-*a*:

**zākònъ* > Cz, Slk, SC, Sln *zákon*

**kǭkòlь* > Cz *koukol*, Slk *kúkol*, P *kąkol*, SC *kúkolj*, Sln *kǫ́kolj*

**ǭtròba* > Cz, Slk *útroba*, P *wątroba*, Sln *vǫ́troba*

**ūtĕ̆xa* > Cz *útěcha*, Slk *útecha*

Type-*b*:

**kъlbāsà* > Cz, Sln *klobása*, Slk (dial.) *klbása*

**rǫkāvь* > **rǫkávъ* with neo-acute in the nominative

**rǫkāvà* > Cz, Slk, SC *rukáva*, Sln *rokáva*

**tętīvà* > SC *tetíva* but Cz *tětiva*, Slk *tetiva*

Type-*c*:

**dě̀vętь* (nom.), **devę̀tí* (gen.) > Cz *devíti*, Slk *deviati* but P *dziewięciu* possibly by analogy with *dziewięć* where brevity would be the expected reflex. On the other hand, in **dè̀sętь, *desę̀tí* where the accentological conditions are identical, Cz has *desiti* (and *desíti*).

3. LENGTH RETAINED IN OTHER POSITIONS

— In preprestressed position if the prestressed vowel is *ъ, ь*:

**pīsъmò* > Cz, Slk, SC, Sln *písmo*

**pě̆sъkь* (nom.), **pě̆sъkà* (gen.) > Cz *písek*, Slk *piesok*, SC *pésak*, Sln *pések*

**pōltьnò* > Cz, Slk, SC, Sln *plátno*, P, UL *płótno*

— In poststressed position. This is attested very irregularly but seems somewhat more frequent if the second poststressed vowel is *ь, ъ*. SC has many

more examples of this than any of the others.

**měsęcь* > Cz *měsíc*, Slk *miesiac*, P *miesiąc*, SC *mèsēc*

but **prędīvo* > SC *prèdīvo* but Cz *předivo*, Slk *pradivo*

The preservation of length in multisyllabic forms brings us into a discussion of the interaction of roots with prefixes and /or suffixes. The difficulty here lies in the fact that we are very often dealing with suffixes (either morphological or derivational) rather than a simple root. Thus, in the instrumental plural of **rȳbami*, *ā* is in poststressed position but in **ženắmi* the same vowel of the same ending is stressed and, as expected, shortened. Similarly the *i* of **ůlica* may be short because of a generalization of this same suffix with short *i* based on forms like **granĭca* where the stressed *ī* would regularly shorten. As will be discussed below, what usually happens in a situation like this is that some suffixes are generalized with length (as *-īvo* and *-īšte* in SC) and others with brevity (*-ivo* and *-iště* in Cz).

4. LENGTH IN DERIVATIVES

Here the situation is much less clear, for we are dealing with forms consisting of several formants, that is, of a root with prefixe(s) and/or suffix(es) plus ending. Therefore, in such forms the root vowel may well be influenced by the presence or absence of length in the unprefixed (or unsuffixed) form. The various prefixes and suffixes are themselves associated with specific stress types and this could lead to the establishment of definite patterns as regards the length of the vowel in either the root or in the prefix or suffix itself.

A concrete example is seen with the common formant *-ina*. When it is affixed to a root, three stress patterns are possible, as follows:

**ĭstina*: type-*a* with fixed root stress

**malĭna*: type-*a* with fixed stress on the suffix

**živinà, žĭvinǫ*: type-*c*

Now, if one examines the development of these forms in Cz (*jistina, malina, živina*) and SC (*ìstina, màlina, živìna*), some interesting questions arise. Since in **živinà* the second *i* was in prestressed position, why is it not long? It is normal for Cz not to preserve length of a prestressed vowel in a type-*c* stress form, but why is there no length in SC where such a thing is expected? There are several factors contributing to this.

If we contrast the accusative forms of **rôkǫ* vs **žĭvinǫ*, we see two entirely different sets of conditions. *ǭ* will retain its length because **rǫ̂kǫ* is dissyllabic; *ĭ* will shorten because **žĭvinǫ* is over two syllables. The second *i* of **žĭvinǫ* will also shorten because there is no rule in SC whereby it would retain its length. In this way, all forms stressed according to type-*c* and containing the formant *-ina* will vacillate between the *ī* of **živīnà* (nom.) and the *ĭ* of **žĭvĭnu* (acc.). As the modern form *živìna* now attests, it was the short variant that predominated. But why should that be?

The answer to that question lies possibly in the stress patterns of **ĺstina* and **malĺna*. In forms of this type the acute *i* of the suffix will automatically shorten. In such a way, a pattern begins to develop whereby the *i* of *-ina* is usually short. Therefore, this pattern could easily influence the choice of the variant with short *i* in forms like *živìna* leading eventually to the present situation.

Now we must ask why in both SC and Cz **malĺna* developed in such a way as to bring about a short *a* since here we have a clear example of the root vowel being in prestressed position in all forms of the paradigm. The answer lies likely in the stress possibilities of other forms containing *-ina*. In both **ĺstina* and **živinà* there is no rule in either Cz or SC whereby the length of the root vowel would be preserved. Therefore, again a pattern develops according to which we usually find a short vowel in roots to which *-ina* is affixed. This pattern influences the choice of a short vowel in the root of all forms containing that suffix.

In discussing the formant *-ina*, it was shown that, as far as we can ascertain, this formant never occurred with a type-*b* stress pattern, that is to say, in a situation where *i* would always be in prestressed position and, therefore, more likely to retain its length. Now if we examine some forms containing *-ьnikъ*, we get quite a different picture.

bắsnьnikъ*: type-*a* (bắsnь* also type-*a*) — fixed root stress
**grěšȍnikъ*: type-*a* (< **grěxъ* of type-*b*) — stress fixed on the suffix
**dъlžьnikъ*: type-*b* (< **dȏlgъ* of type-*c*) with stress fixed on the first syllable after the stem

As can be observed, there is no valid reason to posit retension of length in either the root or the formant of **bắsnьnikъ*, yet Cz has *básník*. Why? The reason for the long root vowel is most likely explained by the fact that the unprefixed root still has a long vowel *báseň* < **básnь* as would be expected in Cz with an acute vowel in forms under two syllables. But why is the prefix vowel long?

Before trying to offer an explanation, let us look at the second example. In **grěšȍnikъ*, we would expect a stress retraction from *ъ* with neo-acute in the root. Thus, we find Cz *hříšník* with the expected long vowel in the root, but why is the prefix vowel long? Finally, in **dъlžьnikъ* we would expect a long vowel in the suffix because of neo-acute **dъlžьnikъ* > **dъlžьníkъ* (nom.) and preservation of prestressed length **dъlžьnīkà* (oblique cases). Thus, Cz *dlužník* is perfectly regular. It would seem, therefore, that the long suffix vowel of regular forms like *dlužník* has in Cz been generalized far beyond its original sphere to forms like *básník* and *hříšník*. This type of leveling happens in all Slavic languages, but each language will generalize in its own way, and each prefix and suffix plus its influence on a given root will have its own history in each individual language. However, even these few examples discussed here again reinforce the general pattern that prestressed length is most often preserved in forms belonging to the type-*b* stress pattern.

5. FINAL LENGTH

A few words must be devoted to this problem of length in final open syllables where such length cannot be attributed directly to contraction, which is the only normal source of length in this environment. Most examples of final non-contracted length are of later origin, limited to a rather small area and each requires its own explanation. For example, in some western dialects of P, we find *ė* (the reflex of **ē*) in neuter nouns of the type *polė, morzė, sercė* etc. < **polje, *morje, *sьrdьce*. This is explainable only by assuming that length was generalized in this type of neuter by analogy to *znan'ė, życ'ė, rolė* where *ė* is quite clearly derived from -**ē* < -**ьje*. Unfortunately, few instances of final length are so easily solved. For example, the origin of *é* in the Cz nominative plural of nouns (usually animate) such as *synové, pánové, židé, hosté, sousedé, učitelé* etc. has no simple or satisfactory explanation, but the documentation makes it clear that it is a later and purely Cz development.

There is very likely a PSl component in the long vowels in the second and third person singular aorist of certain verbs in SC, such as *brâ, klê, nȍsî, dȑžā, gȉnū* etc. Some forms seem to have inherited their length directly from the PSl ⁀ as in *klê* < **klȅnt, mrê* < **mêrt, pî* < **pît*. Other instances of length are almost definitely the result of analogical restructuring and still others the result of a stress shift of the type **bȅra* > *bьrá* or **bьrâ* > *brâ*. In any event the corresponding aorist forms in Old Cz show no evidence of length whatsoever, and this is to be expected if we are dealing with PSl ⁀ which invariably shortens in Cz.

Accepting a stress shift like **bȅra* > *brâ* as a valid source of falling length will explain only those forms in which a weak *ъ* or *ь* were originally stressed as in **dȅva* > SC, Sln *dvâ; *sȅto* > SC *stô*, Sln *stộ* as opposed to **dьnȍ* > SC, Sln *dnȍ* or **sъpȁ* > SC *spȁ* (third sing. aorist of *spȁti*) where *ъ* or *ь* were presumably never stressed. There must be other explanations found for rising length in such examples as Sln *kdọ́* < **kъto* (vs SC *tkȍ* < **ktȍ*) or in such Sln instrumental plural forms as *možmí, kostmí, stəbrí, psí* and also in *râki, lệti, gorâmi* where the neo-circumflex length (see pp. 206-7) indicates that the following vowel was formerly long. Supporting evidence for **í* or **ý* in the instrumental plural is found in Slovincian, some dialects of Cz and the Slavonian dialects of SC. This is obviously a morphologically conditioned sound change as is **á* in the nominative-accusative plural of neuters (see pp. 244-i), the PSl origins of which are very problematic. Each instance of final open length has its own history.

Summary: Preservation of Proto-Slavic length. The diacritics used are the same as elsewhere. The symbol # here indicates that other syllables could be added without changing the result. *ъ, ь* are used only when the presence of a jer is an essential condition; elsewhere *V* can stand for any vowel including *ъ* and *ь*.

SUMMARY ACCORDING TO LANGUAGE

A. *STRESSED SYLLABLES*

Syllabic Structure	*Example Forms*
1. **Czech**	
CV̋CV > CV́CV	*sī́la > síla, *mā́ti > máti, *sȳ́rъ > sýr, *berza > bříza
V̋ > V̌ elsewhere	*sī́lojǫ > silou, *mā́tere > mateře, *ū́lica > ulice, *lopā́ta > lopata
V̂ > V̌ all environments	*sŷnъ > syn, *zǫ̂bъ > zub, *bôrdǫ > brodu
2. **Upper Lusatian**	
CŐR, LC# > CR, LÓC	*vőrna > wróna, *bőlto > błóto
CĔR, LC# > CR, LĚC	*bĕ́rza > brěza, *smĕ́rka > šmrěka
3. **Serbo-Croatian**	
CV̂CV > CV̂CV	*sŷnъ > sîn, *mę̂so > mêso, *gôrdъ > grâd
V̂ > V̏ elsewhere	*sŷnove > sȉnovi, *bôršьno > brȁšno
CV̋CV > CV̀CV > CV̏CV	*sȳ́rъ > *sỳr > sȉr
# CVCV̋CV# > CV̀CV̌CV	*malī́na > *malìna > màlina
4. **Slovene**	
CV̂Cъ, ь > CV̂C	*sŷnъ > sîn, *gôrdъ > grâd
CV̂CV# > CVCV̂	*sŷnove > *sinǫ̂vi,* *bôrdǫ > bradô, *nâ vodǫ > na vǫ̂do
#CV̋CV# > CV̀CV > CV́CV	*sī́la > *sìla > síla, *malī́na > *malìna > malína
CV̋Cъ, ь > CV̀C > CV̏C	*rā́kъ > *ràk > *rȁk
5. **P, Slk, UL**	
V̂ > V̌ all environments	*sŷnъ > P, Slk, UL syn; *rǫkǫ > Slk, UL ruku, P rękę
V̋ > V̌ all environments except *tőrt* in UL	

B. *NONSTRESSED SYLLABLES*

Type-b stress	
1. *CV̄CV̀ > CV̄CV*	*trāvȧ, *žę̄dlȯ, *sǭdȧ *(gen. of* *sǭdъ́*)*
2. *CVCV̄CV̀ > CVCV̄CV*	*kъlbāsȧ, *novākȧ *(gen. of* *novākъ́*)*
3. *#CVCVCV̄CV̀ > CVCVCV̄CV*	*dьlžьnīkȧ *(gen. of* *dьlžьnīkъ́*)*
4. *CV̄Cъ, ьCV̀ > CV̄CCV*	*pīsьmȯ, *pēsъkъ́
Type-a stress	
5. *(C)V̄CV̀CV > CV̄CVCV*	*kǭkòlь, *nāròdъ, *ǭtròba

6. *(C)V̌CV̌CV > CV̌CVCV* **ūt̆̈xa*
7. *CV̌CV̌Cъ, ь > CVCV́C* **zā́jēcь (sporadic, but more frequent in Serbo-Croatian)*

Type-c stress

8. *CV̄CV̀ > CV̄CV* **rǭkà (only in SC)*

The various classes of nonstressed long vowels are attested everywhere but, are arranged in descending order of consistency. That is, No. 1 is the most regularly attested in all those languages capable of showing length, whereas No. 8 is attested only in SC. Note that with the exception of No. 7 all examples are varieties of prestressed length, No. 4 being preprestressed. In UL nonstressed length is restricted to *e* or *o* in *tort*-formula forms.

Contraction as an additional source of long vowels. This process is usually indicated by the formula VjV > VV > V̄, that is, intervocalic *j* drops and the contiguous vowels contract into one long vowel. The process is known in all of W Sl, SC and Sln but is not necessarily identical either in results or extent.

PSl	*Cz*	*Slk*	*P*	*UL*	*SC*	*Sln*	
směješi	smíš	smieš	śmiesz	směš	smȇš	smȇješ	*or* smȇš
kajati sę	káti se	kajat'sa	kajać się	kać so	kȁjati	kájati	
zajęcь	zajíc	zajac	zając	zajac	zȇc	zȇc	*or* zájec
znaješi	znáš	znáš	znasz	znaješ	znȃš	znȃš	
-znanьje	doznání	doznanie	znanie	—	znánje	znânje	

Note that in the last example Cz, Slk, and Old P *znan'é* (dial. *znan'ė́*) attest to the presence of a long vowel. That is, contraction in these areas took place before the loss of weak jers (*ьje > 'ē*) whereas SC and Sln would indicate the opposite chronology at least in this particular category.

As can be seen even from the few examples cited above, the process of contraction is by no means uniform or consistent. Nowhere in Slavic do we find that contraction operated without restrictions. Cz is the most consistent in this respect, but even here as elsewhere we never find contraction in nouns of the type **krajь, *bojь* or **šьja* in which the root ends in *j* + vowel (ending). There can be inconsistency even within one language as, for example, in standard P *stał, bał się* < **stojalъ, *bojalъ sę* but in large areas of Poland one still hears *stojał, bojał* or in UL *čitaš* < **čitaješi* but *znaješ* < **znaješi.*

The vowel resulting from a contraction of the same vowels is not always the same. Thus, for example, in Cz from the sequence *aje* we find *ā* in verbs (*znáš* < **znaješi*) but *ē* in adjectives (*dobrého* < **dobrajego*). The former is doubtlessly influenced by other forms like the infinitive which contain *a* (*znáti*) and the latter by the pronouns *jego, jemu* still containing *e*. Further, the sequence *oje* > *ē* in Cz and P (*dobré* < **dobroje*) but *ō* in SC (*dȍbrō* < **dobroje*).

In one feature, however, there is general agreement; a vowel resulting from contraction retained the palatalizing or nonpalatalizing nature of the initial vowel. This, of course, has relevance only for those areas where overall palatalization of consonants occurs before front vowels. For example, in Cz and P after contraction of, let us say, **dobroje* > **dobrē* and **dějati* > **d'ăti*, there existed consonant followed by a front vowel *(ē)* without palatalization, but a palatalized consonant followed by a back vowel *(ā)*. The occurrence of palatalized consonants was, therefore, no longer predictable and became a distinctive feature. Thus, in Old Cz **dāti* vs **d'āti* ('to give' vs 'to act') differed only by the feature *d* vs *d'* (now *dáti* vs *díti*) or *l* vs *l'* in **lāti* < **lajati* vs **l'āti* < **lьjati* ('to curse' vs 'to pour', now *láti* vs *líti*). In the examples just cited *d'* and *l'* were palatalized before contraction but predictably so because of the following front vowel.

In SC and Sln we still observe a phenomenon which in all likelihood occurred elsewhere in Slavic where intonations still existed. If the first member of any VjV sequence bore the stress, then the resulting vowel received a falling pitch. If the second member was stressed, then the new vowel received rising pitch, that is, in Sln **zắjecь, *pòjasъ* > *zȇc, pâs* vs **stojàlъ, *bojàlъ sę* > *stál, bál se.*

Compensatory lengthening. This term is applied to a process in Slavic whereby the vowel of one syllable is lengthening as it were in compensation for the loss of a jer in the following syllable. It should be reserved for those situations where the loss of a jer is the only feasible explanation for the presence of a long vowel in the preceding syllable. We may illustrate this with an example from P. It is obvious that in a form like *zął* a weak jer was lost after *b (*zǫbъ)*, and since *ą* can arise only from a long vowel, it would appear that we have here an example of compensatory lengthening. This supposition can be proved only when the syllable is opened by the addition of an ending, thus *zął* but *zęba* (gen. sing.) or *zęby* (nom. plural). The *ą* occurs only in a closed syllable that is, where a jer was lost; where a vowel follows the final consonant, then only *ę* (from a short nasal) occurs. This means that the presence of *ą* can be explained only in terms of the loss of the jer — vowel that used to follow it in the next syllable. Contrast this with *sąd* but also *sądu, sądy* where the addition of a vowel does not result in the disappearance of *ą*. Obvious *ą* here has a different origin, namely, neo-acute, in the closed syllable and prestressed length preserved in the open syllables, that is, **sǫdь* > **sǫ́dъ* and **sǭdy̆*.

Again, in the case of PSl **zǫ̂bъ*, comparative evidence clearly shows that this was a type-*c* nouns with the expected circumflex intonation of the root vowel. Therefore, SC *zûb* and Sln *zǫ̂b* are not examples of compensatory lengthening either, for ‿ always retains its length in these languages. Besides, the opening of the syllable as in SC *zûb* - *zûba* does not result in a shortening of *û*. In P, on the other hand, the former long circumflex vowels do not retain their length; they unvariably shorten. Therefore, compensatory lengthening is the only explanation for the long vowel of P *zął*. In a similar vein, Cz *sýr* < **sy̆̄rъ* is not a compensatory

length because *ý* retains old acute length as expected (cp. SC *sȉr*, Sln *sìr*) and also because *ý* remains in an open syllable as in *sýr - sýru*. Conversely Cz *sníh* is a compensatory length because *í* disappears in an open syllable, thus, *sníh - sněhu*.

Since the conditions for compensatory lengthening partially overlap with those for neo-acute, it is readily understood why they are often confused. Neo-acute arose earlier when the jer vowels weakened; compensatory lengthening, when the weak jers were lost. The first is always brought about by a stress shift usually, but not always, from a weak jer; the second is triggered only by the later loss of a weak jer, but there are always additional factors involved. The environments necessary for compensatory lengthening differ greatly from place to place. Neo-acute, as a general rule, does not affect the old short vowels anywhere in Slavic; compensatory lengthening may affect all or only specific vowels on a region to region basis. Evidence for compensatory lengthening is found in SC, Sln, P, UL, Cz, Slk and possibly Ukr along with SW Br under the following conditions:

1. **Serbo-Croatian**: ◌̏ > ◌̂ in such examples as **mědъ > mêd, *nȍsъ > nôs* but *mědu, nȍsa* (see Summary III, No. 3); ◌̀ > ◌́ > ◌̂ before *j* and before *v, r, l, n, m* in an internal syllable (see Summary I, No. 2). Note that elsewhere the presence of a ◌̀ (from old acute) blocks all compensatory lengthening as in **nārȍdъ >*nārȍd,* now *národ*, not **nárōd; *ràkъ > *ràk*, now *rȁk*. The same applies to ◌̀ < short neo-acute (Summary I, No. 5, 6). SC also lengthens all unstressed vowels: **vȅčerъ > vȅčēr, *stărostъ > stârōst* but not strong *ъ, ь* as in **stărьcь > stàrac* or new insert vowel as in **vĕtrъ* (> **vètr*) > *vètar*;

2. **Slovene**: ◌̏ > ◌̂ as in SC (Summary IV, No. 1) as in **nȍsъ > nôs* but since **nȍsa > nosâ* (gen. sing.) it is not certain whether this is a true case of compensatory lengthening. Sln may have lengthened every ◌̏ whether or not it was in a closed syllable. We simply do not know whether the development **nȍsa > *nôsa > nosâ* or **nȍsa > *nosȁ/nosâ*. Old ◌̀ > ◌̂ in an internal syllable (Summary II, No. 2) but neo-acute ◌̀ > ◌́ in an internal syllable (Summary II, Nos. 6, 7). Note the difference: ◌̀ from old acute > ◌̂ but ◌̀ from neo-acute > ◌́. Note also that as in SC a short rising of either origin in a final syllable blocks compensatory lengthening.

3. **Polish** has compensatory lengthening only in final syllables and only before voiced segments. In its initial stages all vowels were subject to it, but now its effects are seen only with *ó* (< *ō*) and *ą* (< *ę̄, ǭ*): **dǭbъ > *dǭb > dąb* but *dęby; *vozъ > wóz* but *wozy; *borъ > bór* but *bory; *medъ > *m'ōd > miód* but *miodu; *glodъ > głód; *bobrъ > bóbr* as opposed to **snopъ > snop, *nosъ > nos, *kotъ > kot, *gǭsь > gęś, *jesetrъ > jesiotr* because of voiceless *p, s, t* and also *t* + *r* or in nonfinal position as in **glodьnъjь > głodny, *nožьnъjь > nożny* vs *nóż* < **nožь*. In Old P there was also lengthening before *m, n* as in **domъ > dóm, *konь > kóń* but length was eliminated in this environment.

In most dialects of P, instances of *ā > å, o* or *ē > ė, i, y* are still well attested, but evidence for *ī* or *ū* is found only in Kashubian: **znalъ > *znāl > znål* vs

*znala; *bregъ > *br'ēg > brzėg* vs *brzega; *synъ > *sȳn > sin*, and **dlugъ > *dlūg > dług* vs *səna, dləga* where *ə* < unlengthened *u, i* and *y* in Kashubian.

Polish has numerous examples of lengthenings which seem to be of the type described in that they occur in a closed syllable but also seem to be exceptions in that they occur before voiceless consonants. This kind of lengthening occurs frequently in the genitive plural of feminine and neuter nouns. For example, from *ręka, sierota, stopa, siostra, cielęta* the genitive plural forms are: *rąk, sierót, stóp, sióstr* and *cieląt*, but it is important to remember that compensatory lengthening is only one, rather later source of long vowels. Here length has another origin; all nouns belonging to type-*b* or type-*c* stress would have had a stressed jer as the genitive plural ending (as in **rǫkь̀ > *rǫ́kъ*) giving rise to neo-acute length. Later this neo-acute length is augmented by compensatory length in forms like **nogь̀ > nóg* or **sovь̀ > sów* (from *noga, sowa*) so that length became a specific feature of this case in a great number of nouns and thus spread by analogy to many forms where it was not phonetically conditioned as in *sierót, stóp, sióstr*, etc.

Similarly, length in such diminutives as *robótka, gąska, kółko, rączka, kózka* is not compensatory in origin but arose either from a neo-acute or by analogy to neo-acute length. Diminutives of nouns with either type-*b* or type-*c* stress were treated the same way. That is, from **mǫkà* (type-*b*) and **rǫkà* (type-*c*), the derived forms are **mǫčь̀ka* and **rǫčь̀ka* in which neo-acute will normally arise, hence, modern P *mączka, rączka.* In this way length of the root vowel became a common feature of many diminutives and thus spread to many more where it was not justified phonetically.[4] For example, from *gǫ́ba* (type-*a*), the diminutive would normally be **gǫ́bъka > gębka* with the expected shortening of acute *ǫ*, but there is also the more common *gąbka* with analogically lengthened *ǫ*.

4. **Upper Lusatian** shows the results of compensatory lengthening only in initial syllables and only with *ó* < *ō* and *ě* < *ē*. The nature of the consonant following the lengthened vowel is not a factor. For example, **ložьko > łóžko, *medъ > měd* but *mjedu; *vozъ > wóz* but *wozy; *osьlъ > wosoł* but *wósła* (gen. sing.), **grodъ > hród* but *hroda; *pecь > pěc* but *pjecy; *nosъ > nós* but *nosa; *kostь > kósć*, also *kóstka.*[5] Because every *o* rises and becomes more labialized before labials and velars, UL orthography no longer marks *ó* before such segments. Therefore, such forms as **bokъ, *bobъ, *ovьca, *groxъ* etc. all have the expected *o > ó* but are now written simply *bok, bob, wowca, hroch.* There are no examples of lengthening in *l*-participles like *njesł* < **neslъ* or *mogł*

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[4] All languages with distinctive vowel length have similar situations. Either length or brevity may become dominant in a given morphological category, and the other feature will be gradually replaced.

[5] Note that not every *ě* alternates with *e* nor *ó* with *o* in an open syllable for *ě* and *ó* have more than one origin: *ě* < PSl *ě* in initial syllables as in *wěra, měć* < **jьměti* or *lěk - lěka* with *ě* retained in an open syllable; *ó, ě* in *tort*-formula forms as *błóto, dróha, brěza, mróz - mróza* (old acute length) or *brózda, žrědło* (prestressed length retained) as well as some examples of neo-acute.

< **moglъ*; otherwise the *e* > *ě* or *o* > *ó* are quite consistent in the conditions defined.

Unlengthened *e* or *o* in a closed syllable can now occur only when *e* < *ъ* or *o* < *ъ* as in **lьnъ* > *len*, **rъžь* > *rož*. There are instances of *ó* < *ъ* and *ě* < *ь* (rare) such as in **bъzъ* > *bóz*, **sъnъ* > *són* or **mьčь* > *měč* (older) and also *mječ* (modern). The age of this feature is unknown; it may be the result of later analogical leveling. Most examples of nouns with *ó* < *ъ* are now declined without loss of the root vowel in the oblique case as in *bóz, boza*, not **bza* < **bъza*; also *són, sona* as opposed to *rož* (above) but *ržě* or **rъtъ* > *rot* or *rót* also has *rta, rota*. The *ó* also seems to occur more frequently in roots having PSl type-*b* stress insofar as this can be established now, that is, *bóz* < **bȍzъ* < **bъzь*, *són* < **sȍnъ* < **sъnь* vs *rož* < **rȍžь* (type-*c*). Therefore, *ó* < *ъ* may be a neo-acute length although this is unusual with *e, o* or strong jers. More likely it is an analogical extension of the model *nós* vs *nosa* to forms which changed their declensional pattern from *boz - bza* to *boz - boza*. (See p. 263.)

5. **Ukrainian** and **SW Br**: If compensatory lengthening ever occurred here, it is seen only with *e* and *o*. In N Ukr and SW Br this so-called lengthening occurs only in stressed closed syllables; in the rest of the region, it can occur in either stressed or unstressed position. In the former area, *ē* > *je* and *ō* > *uo* but in the latter, including the literary language, both *ē, ō* > *i*. For example, **stolъ* > *stuol* (N Ukr) vs *stil* (literary); **pečь* > *pječ* (N Ukr) vs *pič* (literary); **kȁmenь* > *kȁmen'* (no change in N Ukr) vs *kamin'* (literary). All further examples will be in the literary language (SW and SE Ukr): **kotъ* > *kit*, **konь* > *kin'*, **nožь* > *niž*, **neslъ* > *nis*, **šestь* > *šist'*, **ječьmenь* > *jačmin'* with *o* or *e* returning in the open syllable as in *kota, kon'a, noža, nesla, šesty, jačmen'a*, etc. When *e* was followed in the next syllable by *ъ*, it did not undergo any change unless there was a shift of stress onto *e*. Thus, we have **neslь* > *nis* as opposed to **klȅnъ* > *klen* without *e* > *i*.

In addition to this curious exception, there are also the following: new *e, o* < *ь, ъ* are not subject to this change nor are the new *e, o* in the reflexes of *tort*, that is, **dьnь* > *den'*, **sъnъ* > *son* and **morzъ* > *moroz*, **bergъ* > *bereh*, without *e, o* > *i*. The few examples of *i* like *storin* or *holiv* (gen. plural of *storona, holova*) or *sterih* < **stereglъ* < **sterglъ* are all later and limited to certain specific categories. The fact that **tort* > **torot* is older than the loss of weak jers causes serious difficulties. If, for example, the loss of *ъ* in *morozъ* brought about no change in the second *o*, then we must assume that the first steps in the *o, e* > *i* change must have occurred before the new *o* arose, but this preceded the loss of weak *ъ* or *ь*.[6] Therefore, the loss of a weak jer may not be the immediate cause of *o, e* > *i* in Ukr; perhaps the mere presence of *ъ, ь* in the following syllable caused *e* and *o* to narrow but this is still a matter of debate.

[6] It is interesting that *tort*-formula forms are not exempt from compensatory lengthening in either P or UL. Cp. P *mróz - mrozu, głód - głodu* or UL *hłós - hłosa, brjóh - brjoha*.

6. **Czech** seems to have had some type of compensatory lengthening which affected mainly *o* (*ō* > *o̯o* > *ů*), but the precise conditions are difficult to define. It is encountered most frequently before sonorants and voiced fricatives but there are many counterexamples even within this rather narrowly limited group. Thus, we find **gnojъ, *lojъ* > *hnůj, lůj* but *boj, roj; *domъ* > *dům* but *hrom, strom; *dvorъ* > *dvůr* but *bor; *solь, *volъ* > *sůl, vůl* vs *bol; *bogъ* > *bůh* but *roh, stoh* — with these latter we have the added problem of whether PSl *g* was a stop or a fricative in the Cz area at the time of jer loss; **nožь, *vozъ* > *nůž, vůz* but *trnož; *konь* > *kůň* but *zvon*. There is only one clear example of lengthening before *v* and that is the genitive plural ending -**ovъ* > *ův* but not elsewhere (cp. *rov, lov* or *krov*). There is a single instance of *o* > *ů* before a voiceless fricative in **postъ* > *půst* which is often attributed to neo-acute length or by analogy to neo-acute length in nouns of type-*b* stress to which **postь* belonged but so did **voskь* > *vosk* without a trace of *o* > *ů*.

In any event, the possibility of neo-acute length with any short vowel is always doubtful and cannot be the total explanation here, for the examples cited very often belonged to the type-*c* stress where the final jer was never stressed and neo-acute could not arise; *dům, vůz, bůh, sůl, důl* etc., all belonged to this group whereas *kůl, kůň, nůž, stůl*, etc. belonged to the type-*b* stress, but there are numerous counterexamples from both types with lengthening.

A further complication is the fact that Cz provides no evidence of compensatory lengthening in other than monosyllabic roots. For example, *sokol, rosol, koukol, topor, piroh, batoh, tchoř* (< **dъxorъ*), *brloh* (< **bьrlogъ*), *pokoj* whereas in P all cognates have *o* > *ó* except *kąkol*, and Ukr also has *o* > *i* in every form whatever the origin of *o* > *i* may be. The problem here is obviously very complicated and belongs specifically to the history of Cz itself. It cannot be dealt with here in any detail. Tentatively, however, one may suggest a similarity here with the development of old acute length in Cz. With these was observed a general tendency to eliminate the long vs short alternation in the root vowel by generalizing either length or brevity throughout the entire paradigm. The type *mráz* vs *mrazu, hrách* vs *hrachu* (from old acute) can be viewed as a compromise or as the last phase in the complete elimination of the length in the root vowel. However, a pattern with length in a closed syllable vs brevity in an open one is one that can arise only on the basis of compensatory lengthening; this type of alternation, therefore, must have been quite common in order to be productive. If later this limited preservation in length also eliminated as in *čas, jih, kraj* < Old Cz *čás, jíh, kráj* (old acute length), then the same trend could also eliminate compensatory length in *bor* < Old Cz *bór*. The loss of so many possible examples now makes it extremely difficult to establish the origin environments under which compensatory lengthening occurred.

7. **Slovak**: The situation here is extremely complex, and many points are still disputed. Tentatively, we may assume that only *e* and *o* are affected[7] and only when followed by a sonorant or *z, ž* although the total number of examples with *z, ž* is, perhaps, too small to permit any definite formulation. In the case of clusters, it is the last member which is the deciding factor. Thus, in **koprъ* (> **kôpr*) > *kôpor o* developed as in **borъ* > *bôr*, not as in **snopъ* > *snop*.

The lengthening of *e* is found consistently in *l*-participles of the type **neslъ, *peklъ, *vedlъ* > *niesol, piekol, viedol*. The problem here is that the lengthening does not disappear in an open syllable. That is, we have both *viedol* and *viedla* < **vedla* where no *ъ* was ever lost.[8] Therefore, there is the possibility that length here is solely by analogy to the long root vowel in forms of the type *triasol, triasla* < **tręslъ* (neo-acute), **trę̄slà* (prestressed length). If this were so, then the assumed *nesol, nesla* would have adapted this length at the same time and have the same geographic distribution, but the spread of *niesol* and the like is greater than that of *niesla*, etc. indicating that the length in *niesol* is of a different and earlier origin than in *niesla*. There is no explanation for **neslъ* > **nēsl* other than compensatory lengthening whereas length in *niesla*, etc. is obviously by analogy to both *niesol* and *triasla*.

Examples with *ô* < *ó* involve not only forms like *nôž - noža* with the expected brevity in an open syllable but also *bôb - bôbu* with length in all cases — a fairly common feature in Slk. Other examples are *kôň - koňa, stôl - stola, pôst - pôstu, vôl - vola, kôpor - kôpru* or *bôr - bôru*. However, most examples with *ô* also occur in the dialects without lengthening, that is, *nož, bob, koň, stol, vol* or *bor*. These latter forms are sometimes quite rare (*nož, stol*) and sometimes quite common (*vol, bor*), but the presence of competing forms is very well attested: *hnoj - hnôj, dom -dôm, boh - bôh, voz - vôz, sol' - sôl', tchor - tchôr, zvon - zvôn* or *roh - rôh*.[9] The eastern fringe of Central Slk has all but eliminated the ô-forms whereas W Central Slk and W Slk as a whole tend to retain them in the expected environments. It is hardly any wonder then that literary Slk, based as it is on Central Slk, presents such a muddled picture.

It would seem therefore that Central Slk is somewhat of battleground where alternations of the type *vôz - voza* are part of an ever shrinking pattern being gradually replaced by the simpler *voz - voza* (literary norm) or *bôr - boru* by either *bor - boru* or *bôr - bôru* (both accepted as literary). The documentary evidence, although meagre, also indicates the presence of long vowels in such forms as *dom, svoj, tvoj, synov* in areas where length is unattested at present.

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[7] With vowels other than *e, o* there are only four examples that look like compensatory lengthening. These are: *mráz - mrazu, chlieb - chleba, dážď - dažďa* and *vietor - vetra*. The same four also have the same pattern in Cz and dialectal P has *dészcz - dészczu; vietor* is limited to NE Central Slk. Obviously each form has its own history whether Late PSl or regional and is not connected with compensatory lengthening at least in Slk.

[8] Contrast this with P *wiódł* vs *wiodła*.

[9] In this set of examples, the *o*-forms (*hnoj, voz* etc.) are the literary norm.

The development of the genitive plural ending *óv* < **ovъ* is very instructive in explaining a large number of apparent exceptions. Length or its reflex is retained in these areas (largely W Slk and W Central Slk) where *ó* does not diphthongize or where *-v* is articulated as consonant, that is, *synóv, synóf* or *synu̯ov, synu̯of*. However, where *-v* is articulated as a glide, the final result is *-*ovъ* > *ou̯* without trace of lengthening, for where *ó* diphthongizes, **óu̯* would give *u̯ou̯* (still attested marginally) but usually this *u̯ou̯* simplified (or dissimilated) to *ou̯*. If there exists a general tendency to eliminate a triphthong like *u̯ou̯* > *ou̯*, it is also reasonable to assume a similar tendency with **u̯oi̯* > **oi̯*. This would explain why we now have no instances of *ô* + *v* and very few of *ô* + *j* (only *môj* and dialectal *hnôj, rôj*). There is also a general restriction on the sequence C + *v* + *u̯o*; thus, we now find *dvor, svoj, tvoj* in areas where *ó* > *u̯o* but *dvór, svój, tvój* where *ó* is retained (W Slk).

There remain, nevertheless, many unexplained exceptions. In forms like *bobor* < **bobrъ* (as opposed to *kôpor* < **koprъ*), *hrom* < **gromъ* or *dol* < **dolъ*, we are forced to assume an earlier lengthening and subsequent loss. On the other hand, there is no apparent reason for length in *bôb, kôš, pôst*[10] or dialectal *bôh* although the last two may be Czechisms. *kóš* is also attested in Old Cz and irregularly in P dialect (as is *póst*) and may be examples of sporadic lengthening of Late PSl origin taking in S Central W Sl. *bôb* is limited to Central Slk and not found in W Slk at all.

Summary: The distribution of prosodic features

1. FREE AND MOBILE STRESS: R, Ukr, Br, Blg but instances of mobility are greatly limited; SC but stress not possible on a final syllable.

2. FIXED STRESS: Cz, Slk, UL, LL on the initial syllable; P on the second last (also all E Slk and intervening Lemko dialects of Ukr); M on the third last syllable.

3. DISTINCTIVE VOWEL LENGTH: Cz, Slk (with the restriction known as the rhythmic law, pp. 242), SC, Sln (only in final syllables); P until the fifteenth century; UL and LL if it ever existed, it was lost before documentation.

4. DISTINCTIVE PITCH: SC and older norm for Sln (now dialectal).

The development and continuing significance of prosodic features may be il-

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[10] **bobъ, *košь, *postъ* all belonged to type-*b* stress and there is the possibility that *o, e, ъ* or *ь* in the root of this stress type may have occasionally lengthened by analogy to the neo-acute length of other vowels in the same stress type. Since in forms like **kǫ̀tъ* - **kǭtà* neo-acute of the root vowel is normal, irregular lengthening could, perhaps, arise in **bóbъ* - **bobà* instead of *bòbъ* - *bobà*. This would happen with individual lexical items, each with own geographical distribution. SC *nôž* - *nóža* is an example of this type of adjustment.

In W Sl all such shifts would of necessity have to take place when final stress was still possible. It is usually assumed that *ô* in *bôbu*, etc. is a later purely local Slk development but may be a PSl extension of length in a prestressed syllable by analogy to **kǭtà* etc. or as **grozà* > *hrōzà* > *hrôza* by analogy to **trāvà* > *tráva*.

lustrated by contrasting the reflexes of certain roots whose phonological structure is identical but that differed from each other by virtue of one or more prosodic features in PSl in the following columns:

1. **dőrga:* 'road, path, channel, trench' with type-*a* stress and acute of the root syllable. In modern Blg it is attested only dialectally.

2. **dorgà:* 'dear, beloved' — nominative feminine singular, short form of the adjective **dôrgъ, *dorgà, *dôrgo* with type-*c* stress.

3. The long (definite) form of No. 2. This could have the stress either **dorgőja* or **dórgaja* for which only SC provides any evidence.

4. **pêtь:* 'five' with type-*c* stress which forms a phrase with No. 5.

5. **pętъ* (with neo-acute) <**pętъ* — genitive plural of No. 7.

6. **pętaja* 'fifth' — nominative feminine singular long form modifying No. 7.

7. **pętà:* 'heel' with type-*c* stress.

	1	*2*	*3*	*4*	*5*	*6*	*7*
PSl	dőrga	dorgà	dorgőja	pętь	pętъ	pętaja	pętà
R	doróga	dorogá	dorogája	p'at'	p'at	p'áataja	p'atá
Ukr	doróha	dorohá	/dorohája/	pjat'	pjat	pjáta	pjatá
P	droga	—	droga	pięć	pięt	piąta	pięta
Cz	dráha		drahá	pět	pat	pátá	pata
Slk	dráha	—	drahá	päť	piat	piata	päta
UL	dróha	—	droha	pjeć	pjatow	pjata	pjata
LL	droga	—	droga	pěś	pětow	pěta	pěta
Blg	dràga	—	dràga	pet	petì	pèta	petà
SC	drȁga	drága	drâgā	pêt	pétā	pêtā	péta
Sln	drága	—	drága	pẹ̑t *or* petá	pẹ́t	pẹ́ta	péta

Final remarks

• Note the role of stress in R and Ukr — 1 vs 2; Ukr and Blg — 6 vs 7. The loss of contrast in Blg in 1, 3 is morphologically conditioned. Blg has tended to generalize root stress in adjectives, but forms like *dobrà žená* are still possible.

• Russian and SC are the only languages which consistently distinguish long and short form adjectives although there are remnants everywhere. SC, Sln and W Sl also have contraction and if long vowels are later lost, it is impossible to discern to origin of a given form. Thus, because of *-á* it is obvious that Cz, Slk *drahá* < **dorgőja,* not **dorgà* but P, LL *droga* could derive from either although in most instances the adjectival declension is derived from the long form.

• Note the role of vowel length in Cz and Slk — 1 vs 3; in Cz — 6 vs 7; SC — 4 vs 5.

• Cz and P lost neo-acute length in 5 by morphological processes but Slk, SC and Sln retained it. A merger in P is prevented only by the hard vs soft contrast in consonants exactly as in E Sl. Cz also belonged here, for *ę* > *ě* because *t* used to be soft.

• Polish and Slk no longer have a length contrast in 6 vs 7 but there used to be. This is an example of a quantitative contrast being replaced by a qualitative one. The same applies to UL in 1 vs 3.

• Note intonational contrast in SC 1 vs 2 and Old Sln *pę̑t, pę́t* or also Čakavian SC *pêt, pét*. The new genitive plural *ā*-ending introduces a new stress contrast in Sln, *péta* vs *petá* and length contrast in SC *péta* vs *pétā*.

• A former stress contrast in Sln in 6 vs 7 is replaced by a contrast in vowel quality.

Codex Assemanianus. Fol. 97a (XIth century)
A specimen of Glagolitic script (see also p. 33)

CHAPTER IX

Summary of the Major Differences in the Individual Languages

Set of traditional questions. In Chapter V we saw, at least in outline, how PSl disintegrated into dialects as various innovations of linguistic changes took different forms in different areas. We also saw that in many instances the features which now distinguish one Slavic language from another had their origin in PSl times. Linguistic change, of course, did not cease after the fall of the jers. If, therefore, we are to compare and/or contrast any of the Slavic languages by tabulating their major differences, we must take into consideration those differences which arose both before and after the end of PSl. If this were done thoroughly, it would be tantamount to writing a complete phonological history of each and every language from the time of the second palatalization right up to the emergence of the language in its present-day form.

Such a vast project is far beyond the scope of any introductory textbook and is not really necessary for a variety of reasons. Firstly, the Slavic languages after the fall of the jers entered a period of relative stability in which innovations were less numerous and less spectacular. Secondly, it has become standard practice to single out for mention only these innovations which are considered as particularly characteristic or as a distinguishing mark of the language in question. The difficulty with this approach is that when speaking of linguistic change, terms like "spectacular, characteristic" or "distinguishing" are subjective. On what basis could one decide whether any given linguistic feature is of major or minor importance? The answer is that the decision is very largely based on tradition. Important is anything which generations of Slavists have considered important. In other words, every textbook tends to dwell on certain details and neglect (or treat superficially) others. The decision as to which features deserve attention represents a traditional consensus but, at least, a consensus on the part of those well qualified to state an opinion.

In essence then, in any general overview of the individual Slavic languages, we are interested in answering a specific set of questions which are always asked whenever a Slavic language is studied historically. For the sake of clarity, let us then take a look at the more commonly encountered questions on this traditional checklist.

1. Regarding the second palatalization: Does *g* > *dz'* or *z'*? Does *x* > *š* or *s'*? Do the velars in *kv, gv* palatalize or not? How do *sk, zg* develop?

2. Regarding the third or progressive palatalization: Does *g* > *dz'* or z'? Does *x* > *š* or *s'*? How consistent or regular is this palatalization in the area under investigation?

3. Do *dl, tl* simplify to *l* or not? If not, do they remain as *dl, tl* or undergo other changes?

4. Does the metathesis of *ort-* give *rat* and *rot* or *rat* only?

5. Are nasals vowels retained or not? If not, what are the denasalized reflexes?

6. What changes occur with *tort*-formula forms? Is metathesis or pleophony attested?

7. How do the strong jers vocalize? Does the back jer remain its rounding? Are there any special conditions for the occurrence of strong jers in the area in question? Do tense jers develop differently than other strong jers? How does *jь-* develop?

8. What are the reflexes of *ě* of all origins (*ě*$_1$, *ě*$_2$, *ě*$_3$)?

9. What are the reflexes of *tj, ktě, gtě*?

10. What are the reflexes of *dj*?

11. What are the reflexes of *stj, sk* + *j* or *sk* + a front vowel?

12. What are the reflexes of *zdj, zg* + *j* or *zg* + a front vowel?

13. Is epenthetic *l'* retained or not?

14. How do the *tъrt*-formula forms develop?

15. How do the *trъt*-formula forms develop and in what relationship with *tъrt*? Do *tъrt* and *trъt* merge? Do they give rise to *r̥*?

16. Regarding the prosodic features: Is free and mobile stress retained or is there fixed stress? Are intonations and vowel length still distinctive? If so, with what changes from the Late PSl state of affairs?

17. Was there an overall palatalization of consonants by front vowels? If so, how is this reflected now?

18. What are the reflexes of *y* < *ū*$_1$?

19. Was there any labialization of *e* (*e* > *'o*)? If so, in what environment?

20. Did the sequence VjV contract or not?

21. Does *g* remain a stop or does it become a fricative?

Comments. Such a checklist could, of course, be lengthened, but for most textbooks fewer answers would be attempted. Which problems to neglect, naturally depends on the author's dedication to detail. Nevertheless, certain features are considered so basic that they are always mentioned no matter how elementary or superficial the treatment. These are the ones listed under 1-7, 9-10, 13 in our numeration.

It is indeed interesting to note how many of the features considered distinctive for each modern Slavic language arose within the PSl period. This includes such

processes as described in Nos. 1, 2, 3, 4, 6, 9, 10, 19 or 20 which both began and for the most part reached their completion before the fall of the jers. Other phenomena, however, such as described in Nos. 16, 17 only had their origin in that period but did not reach their present forms until much later and continue to change and develop in certain details even now. Other features, so to speak, straddle the line in that they can be labelled PSl in certain areas but post-PSl elsewhere. For example, the loss of nasals (No. 5) preceded the loss of jers in E Sl but not in the Macedonian—Bulgarian area where these two processes occurred in reverse order. Similarly with the loss of epenthetic *l* which is PSl as far as W Sl is concerned but is much later in the Macedonian—Bulgarian area where it is almost simultaneous with the loss of jers, or possibly a bit later. The evidence also indicates the lenition of *g* (No. 21) preceded the loss of the jers in Ukr, Br and Slk but very likely shortly after that in Cz and UL. The final reflexes of *ě* and *y* (Nos. 8, 18) fall in the post-PSl period for most areas of Slavic, and the final reflexes of *ę* and *ǫ* fall into this period for some areas. However, as was mentioned elsewhere, the nasals, *ě* and *y* very likely existed in regional variants almost from the moment of their having arisen in Slavic.

The use of such a checklist can be best illustrated by a few concrete examples. If one is to compare the lists of cognates provided on pp. 334-49, it will be noticed that certain words occur in almost identical forms right across the board; others show differences so great as to be almost unrecognizable from one language to another. Take, for example, two very commonly used concepts — one meaning 'old', the other, 'young'. One will notice that as far as the root form for 'old' (**star-*) is concerned, only Polabian shows any change in that *a* (in strong position) > *o*, and this is a later change. In all the other languages we see no differences at all. The cluster *st* + back vowel or *r* + back vowel are stable situations, not normally subject to any changes. The root for 'young' (**mold-*), on the other hand, happens to contain that syllabic structure known in Slavic linguistics as the *tort*-formula. It is precisely the different developments in syllables of this type which are responsible for the differences presently existing in the modern languages. Nowhere, however, has there arisen any set of conditions for any processes affecting *m* or *d*.

Only in P and both Lusatian languages do we see *l* > *w* (orthographically *ł*); this is a later development but one connected with the palatalization (or lack thereof) of consonants. In these languages all nonpalatalized *l*'s develop in this way. The only other differences which could arise in the root are ones affecting the quantity and/or pitch of the vowel. This can have relevance only in Cz, Slk, SC and Sln.

If we look at other common examples in this list of adjectives, we notice the same pattern. Some roots show no or only minimal differences whereas other have obviously undergone very considerable restructuring. To this latter category belong roots containing one or more of the traditional "trouble spots" enumerated on the checklist. Thus, the roots for 'black' (**čьrn-*), 'red' (**čьrv-*),

'long' (**dьlg-*), 'full' (**pьln-*) and 'yellow' (**žьlt-*) all belong to the group known under the general heading of *tъrt*-formula, and as such they can be expected to exhibit a great variety of developments. The root for 'strange, foreign' (**tjudj-* < **teud* + *jŏ*-stem declension) contains two such trouble spots, namely the reflexes of *tj* and *dj*. As one checks over the great variety of forms existing from language to language, one notices that it is precisely on the basis of differing reflexes of *tj* and *dj* that the word for 'strange' differs, not on the basis of any difference in the root vowel. Only in two instances, in Cz and Polabian did *u* undergo any change. Therefore, changes in *ŭ̆* (especially *ŭ*) are unusual or unexpected in Slavic. Therefore, such an item or point is not included in any checklist of possible differences.

Let us take one more example using the root for 'green' (**zelen-*). On what basis or bases could this form possibly develop differently in the various languages? As is evident, this root contains no *ort-*, *tort-*, *tъrt-* or *trъt*-formula nor does it have any *tj, dj, stj*, epenthetic *l*, weak or strong jers, *ě* or the nasals. The only possible source of difference lies in the fact that we have *z* and *l* + *e*, a front vowel. This means that we can expect differences in the presence or absence of palatalization of *z* and *l*, and for certain regions there is also the possibility of *e* > *'o*. These and the prosodic features are the only possible criteria under which we can expect differences of a general Slavic nature. Any other features such as the Br *'e* > *'a* (**zel'en-* > *z'al'on-*) or the R *'e* > *'i* which is not indicated orthographically (**zel'en-* > *z'il'on-*) in prestressed syllables are either mentioned only in passing or not discussed at all in introductory textbooks. This is because these features are considered as later innovations of a purely local nature. This traditional view regarding *akan'e* and any related phenomena as being of non-PSl origin may very well prove untrue, but the examples just cited demonstrate the principle. Introductory textbooks of Slavic linguistics try to avoid discussion of later or local features no matter how interesting or pervasive they may be.

Remarks on literary or written languages. In the following summaries it is important to understand what precisely is being described. We can compare and contrast only that type of language which has been standardized in written form, that is, the literary language of each Slavic nationality. By necessity, we must neglect the fascinating but complicated problem of how each of these written languages arose and how each one came to exist in its present form. As the preceding chapters have demonstrated, PSl during the period of disintegration did not break down into twelve neat groups which later developed into the existing literary languages. The fact that there are now twelve Slavic literary languages — not ten or fifteen or any other number — is only partially explainable in linguistic terms. As often as not political and historical factors were equally decisive.

Slovak and Cz are a good case in point. The western Slk dialects do not differ in any essential way from the Cz dialects (Moravian) immediately to the west and north of them. Linguistically speaking there is no major reason why both these

groups could not make use of the same literary language, but political factors intervened. The modern border dividing the Czechs and Slovaks corresponds to that which separated the kingdom of Bohemia centred in Prague from the kingdom of Hungary. All those to the west of this border have experienced a common political and cultural development. They all, therefore, feel themselves members of a single nationality which we know as the Czechs. Those on the other side of this border have undergone quite different historical processes and, therefore, feel themselves as belonging to the same nationality as those to the east of them with whom they share this common history, that is, with those people whom we know as Slovaks. This should by no means be interpreted as meaning that nothing of a linguistic nature separates the Cz and Slk languages. Standard literary Cz based on the dialects of Central Bohemia and standard literary Slk based on the dialects of Central Slovakia represent quite distinct linguistic systems. However, the dividing line between those claiming either Czech or Slovak nationality and thus those using either literary Cz or Slk is not based on any solid linguistic criteria.

It is, therefore, interesting to speculate that if all of Bohemia, Moravia and Slovakia had been a single political entity, then quite possibly only one literary language may have developed in the entire area. As stated, Central Cz (Bohemian) and Central Slk are quite distinct, but this fact alone would not necessarily have been decisive. Many a literary language serves the needs of people speaking very diversive dialects.[1] Again Slk provides us with a fine example of this. Speakers of E Slk have considerable difficulty in mastering the literary language. So great are the differences that it would be almost as easy for them to master P. In fact, the Protestants of Eastern Slovakia did use this dialect for religious purposes (catechisms, hymnals, etc.) from about the middle of the eighteenth century until the early years of this century. However, with the growth of Slovak national feeling, these Protestant communities abandoned their own local dialect in favour of standard literary Slk for all purposes including religions.[2] Nevertheless, the point is that if purely linguistic differences were the sole deciding factor then E Slk would certainly have evolved into a distinct written language, but history decided other-

[1] Standard written Grm is the literary vehicle for all speakers of both High and Low Grm — two very different types of Germanic speech — each containing deep dialectal divisions within itself. On the other hand, all Scandinavians understand each other (in all but exceptional circumstances) and yet four literary Scandinavian languages, Danish, Swedish and two forms of Norwegian are in existence.

[2] Eastern Slk, however, lives on as a literary language in the Novi Sad area of Jugoslavia. Speakers of this dialect began settling there in the mid XVIII century but did not begin using the dialect for literary purposes until the end of the last century. However, because they are mainly Greek Catholics they consider themselves Ukrainians and their language as a variant of Ukr and, therefore, write it in Cyrillic. This feeling of Ukrainianness is largely due to the fact that their clergy used to train in Lviv and were caught up in the strong Ukrainian national movement of that time. They transferred these sentiments to their parishioners. This language still enjoys semiofficial status as a language of instruction in the local schools. Newspapers, almanacs and some literary works are also published in it.

wise. Precisely the same considerations apply to the Kashubian dialects of P.

From the few remarks above, it is evident that Slk or any other Slavic literary language is not simply the written form of how that nationality speaks. The situation is much more complicated than this commonly encountered but simplicistic view. In order to put any literary language in its proper historical and linguistic prospectives, several factors must be clarified.

WHAT IS THE DIALECTAL BASE OF THE WRITTEN LANGUAGE?

Every literary language must, in the final analysis, have its origin in some living speech form. Individuals of a given cultural milieu may begin reducing their own speech to written form for a variety of reasons (political-administrative, religious, creative, etc.) which are usually irrelevant in the linguistic sense. However, it is important to define where this event took place, for we are interested in learning whether this newly written language arose in an area speaking a transitional, mixed or pure (that is, unified, homogeneous) dialect. The answer to this question (and to the next) also tells us what dialects were excluded from the literary form of the language under discussion.

WHAT OTHER DIALECTAL REGION (OR REGIONS) HAVE CONTRIBUTED TO THE LITERARY LANGUAGE?

Whatever dialects may have formed the basis for a given literary language, other dialectal areas may have been drawn into the process later. For example, those involved in developing this new written language may deliberately and conscientiously incorporate features from neighboring dialects in order to give the language a broader base of appeal. Alternatively, political and/or economic factors may cause cultural centre to shift to another area with an entirely different dialectal base as was the case with Ukr.

In the late eighteenth century, various creative people in the Eastern Ukraine (specifically in the Poltava region) began using their own local dialects as a literary vehicle. However, later prohibitions against the use of Ukr in Czarist Russia stifled this activity. These restrictions, of course, did not affect the Ukr speaking areas in the Habsburg Empire. Therefore, at a very crucial period, lasting over half a century, all those actively involved in developing a standardized literary Ukr were by necessity either speakers of or connected with the W Ukr dialects (largely of Central Galician dialects). In this way the modern language came to contain many purely western elements in spite of its initially eastern origin.

WHAT EXTERNAL FACTORS AFFECTED THE NEW LITERARY LANGUAGE?

By this we refer to the possible influence of an existing and prestigious literary language in an area where a new literary vehicle is developing. All Slavic nationalities of Orthodox faith have been strongly influenced at some period in their literary history by Church Slavic; modern standard R still shows this influence most dramatically whereas Ukr and Serbian have broken with this tradition almost totally. Cz greatly influenced P and at a later date Slk and UL. P in turn then played a similar role in Ukr.

WHAT IS THE AGE OF THE LITERARY LANGUAGE?

Here we are interested in the length of time any given literary language has been standardized. As a general rule, we may say that the longer a language has been standardized (that is, existed in a literary form), the greater will it differ from any spoken form of that language. This is not a major problem with the Slavic languages since most of them are comparatively young in their literary forms. By and large these languages have not had the time to experience any thorough going phonological changes since the time of standardization to the present day.[3] Nevertheless, examples of this phenomenon are certainly not unknown in the Slavic world. Cz is possibly the most striking example among the Slavic languages where the archaic written form differs so markedly from the spoken language. Note also in P the two spellings for *ž* (*rz* and *ż*) and for *u* (*ó* and *u*); in UL the two spellings for *ų* (*ł* and *w*) or the retention of "silent *h*", etc. Occasionally archaic forms are purposely used in order to put the language above narrow dialectal limitations, that is, to give it an overall unifying character transcending purely local features. For example, the dialectal divisions in Sln are so deep that a new written language based exclusively on one dialect would only reluctantly be accepted by speakers of other dialects and would be nothing but a hinderance to national unity. Thus, modern standard Sln is written in an etymological orthography suggesting some sort of Proto-Sln which in actual fact may never have existed.

CZECH

1. The second palatalization

   k > *c*: **kě₂lъjь* > *celý*, **na rǫkě₂* > *na ruce*
   g > *z*: **na nogě₂* > *na noze*
   x > *š*: **xě₂rъjь* > *šerý*, **na mūxě₂* > *na mouše*
   kv > *kv*: **kvě₂tъ* > *květ*
   gv > *hv*: **gvě₂zda* > *hvězda*

2. The third palatalization

   k > *c*: **granika* > *hranice*, **xolpъk-* > *chlapec*
   g > *z*: **kъneg-* > *kněz*, **pěneg-* > *peníz*
   x > *š*: **vъx-* > *vš-* (as in *všechno*)

3. The retention of *dl*, *tl*

   **mȳdlo* > *mýdlo*, **šīdlo* > *šídlo*, **vedlъ* > *vedl*

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[3] English is a prime example of the opposite situation, and this, in large measure, explains the chaotic nature of Eng spelling, a system much better suited to the phonology of Chaucer's speech than to any modern spoken variety of Eng.

4. *olt, ort* in initial position

**ôlt, *ôrt > lot, rot*
**ŏlt, *ŏrt > lat, rat*
**ôltъtь > loket* vs **ŏlkati > lákati*
**ôrvьnъjь > rovný* vs **ŏrdlo > rádlo*

5. The *tort*-formula

**tort > trat: *borda > brada, *vorna > vrána*
**tolt > tlat: *solma > sláma, *dolto > dláto*
**tert > tr'ět: *berza > bříza, *bergъ > břeh*
**telt > tlět: *melko > mléko*

In *telt* there is often a backing of the vowel after palatals (from the first palatalization of velars). This is more common in long syllables.

**želbъkъ > žlábek, *čelnъkъ > článek* (but *člen*)
**želza > žláza* (see pp. 145-6)

Note the following later developments:

*sr > str: *serda* (> **sr'ěda*) *> středa, *sorka* (> **sraka*) *> straka*
*čr' > tř: *čerda* (> **čr'eda*) *> tříza*

6. The reflexes of *ь, ъ*

ъ > e: **sъnъ > sen, *mъxъ > mech, *rъtъ > ret*
ь > e: **lьnъ > len, *dьnь > den, *rьkǫ > řku*
ъj > yj: **takъjь* (> **takyjь*) *> taký*[4]
ьj > ij: **kostьjь* (> **kostijь*) *> kostí*
jь > (1) *je* (in strong position): **jьgъla > jehla*
(2) *j* > ø (in weak position): **jьmamь > mám, *jьměti > míti*

Occasionally *j* is retained: **jьgo > jho, *jьdǫ > jdu* and Old Cz provides many examples of this.

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[4] Examples with the so-called tense jers are not immediately obvious since syllables of the type *ъ, ъ + j + vowel* are all subject to contraction in Cz. However, the type of new long vowel resulting from these contractions tells us sometime about the members of the sequence before contraction. For instance, in **takъjь* if the strong *ъ* is to develop as elsewhere we would expect *ъ > e* but wherever *e* occurred as in *e + j + vowel* the result was an *ē*-type vowel. Thus, **takъjь > taký* as in **kryjь* or **kryji > krý* (old imp., now *kryj*) where we see that *ъ* in *ъjь* develops exactly as if it were *y*. Similarly , **kostьjь > kostí*, not **kost'e*.

It is a common mistake to see in such Cz verbs as *piji, piješ; biji, biješ*, etc. the reflex of tense *ъ* since they derive from **pьjǫ, *pьješь, *bьjǫ, *bьješь*. But the weak *ь* will either disappear as in ESl or contract as in Cz and Slk. Thus, **pьjǫ, *pьješь* > Old Cz, Old Slk *p'ú, p'éš* vs Ukr *pju, pješ*. The *i* in modern Cz *piji, piješ* or Slk *pijem, piješ* was introduced from other forms such as *píti* and *pil*. Even the newer Cz imperative *pij* is not to be compared to R *pej* or Ukr *pyj* but rather to Old Cz *pí* < **pьjь* where *í* (not **é*) shows not only contraction but that *ь + j* developed like *i*, not like *e* < *ь* in other environments.

In the modern language there are few traces of *ь* having been palatalizing vowel, but this was not so at an earlier period as the history and dialects of Cz demonstrate.

7. The reflex of *tj, kti, gti* > *c*

   **noktь* > *noc, *světja* > *svíce, *velkti* > *vléci*
   **mogti* > *moci*

8. The reflex of *dj* > *z*

   **medja* (> **medz'a*) > *meze, *prędja* (> **pr'ādz'a*) > *příze*

9. The reflexes of *sk* + FV, *skj, stj* (> *šč*) > *št'*

   **pustjenъjь* > *puštěný, *luskiti* (> **luščiti*) > *luštiti*

10. The reflex of *zg* + FV, *zgj, zdj* (> *ždž*) > *žd'*

    **jezdjenьje* > *ježdění*

11. Loss of epenthetic *l* at morpheme boundaries

    **kūpja* > *koupě, *zemja* > *země, *grabjě* > *hrabě* but **pjuti* (> **pl'úti*) > *plíti*

12. The *tъrt*-formula

    **tъrt* > *tr̥t: *gъrdlo* > *hrdlo, *tъrgъ* > *trh, *kъmiti* > *krmiti*
    **tъrt* > (1) *tert* (after *č, ž*): **čъrnъjь* > *černý, *žъrdь* > *žerd', *čъrpati* > *čerpati*
    (2) *tr̥t* (elsewhere): **sъmъrtь* > *smrt, *sъrdьce* > *srdce, *tъrpěti* > *trpěti, *tvъrdъjь* > *tvrdý*
    **tъlt* > (1) *tlut* (when syllable was short): **xъlmъ* > *chlum, *pъlkъ* > *pluk, *mъlva* > *mluva*
    (2) *tlout* (where syllable was long): **stъlpъ* (> **stl̥̄pъ*) > *sloup*
    **tъlt* > (1) *tl̥t* (after labials): **vъlkъ* > *vlk, *pъlnъjь* > *plný, *mъlčati* > *mlčeti*
    (2) *tlut* (when syllable was short): **čъlnъ* > *člun, *žъltъjь* > *žlutý, *sъlnьce* > *slunce*
    (3) *tlout* (when syllable was long): **dъlgъjь* (> **dl̥̄hý*) > *dlouhý, *tъlkti* (> **tl̥̄ci*) > *tlouci*

13. The reflexes of *trъt, trъt, tlъt, tlьt*

    Czech like all of the N Sl languages (except Slk) shows separate developments for these formulae depending on whether the jer is in weak or strong position. In strong position, *ъ, ь* develop regularly (as shown in No. 6); in weak position they are lost after which *l* and *r* usually vocalize.

IN WEAK POSITION:

**trъt* > *tṛt: *krъve* > *krve, *brъvitъjь* > *brvitý*
**trъt* > (1) *tř́t* (before labials and velars): **grъměti* > *hřměti, *grъbьtъ* > *hřbet*
(2) *tṛt* (elsewhere): **brъněti* > *brněti, *trъnožъ* > *trnož*
**tlъt* > *tl̥t: *jablъko* > *jablko, *glъtati* > *hltati*
**tlьt* > *tl̥t: *slьza* > *slza*

IN STRONG POSITION

**trъt* > *tret: *krъvь* > *krev*
**trьt* > *třet: *krьstъ* > *křest*
**tlъt* > *tlet: *jablъkъ* > *jablek* (gen. plural)
**tlьt* > *tlet: *slьzъ* > *slez* (gen. plural)

Forms belonging to this group are subject to constant analogical levelings in either one direction or the other. Thus, the old accusative **brъvь* > *brev* has now been replaced by *brva* modeled on the *a*-stem feminines; **krъtъ* > *krt* (not the expected *kret*). *krt* is modeled on the oblique cases (*krъta*, etc.) where *ъ* was in weak position. **plъtь* > *plet'* but **plъti* > *pleti* (not the expected **plti*).

14. The nasals

ǫ denasalizes and merges completely with *u* sharing with the latter identical developments.

ǫ, u > (1) *u: *dǫbъ* > *dub, *duša* > *duše*
(2) *i* (after palatals): **c'uzí* (< *tjudj-*) > *cizí, *jugъ* > *jíh*
ǭ, ū > (1) *ú* (in initial position): **ǭgorjь* > *úhoř, *ūrędъ* > *úřad*
(2) *ou* (elsewhere): **sǭdъ* > *soud, *mūxa* > *moucha*
ǫ, u > (3) *í* (after palatals): **dušejǫ* (> **dušū*) > *duší, *kl'učь* > *klíč, *pīšǭ(tь)* > *píší*

ę also denasalizes and merges with *'a* (that is, *a* after a soft consonant). The resulting vowel (transcribed as *ä, ă* in Cz historical linguistics) then merges with *'a* if followed by a hard consonant except *k*. In other environments *ä, ă* merge with *ě*, sharing with it identical developments. These processes are known as *česká přehláska* (Czech vowel shift). *ă* resulting from contraction is also subject to the same developments.

ę > ä > ě	ę > ä > a
*rāmę (> *rām'ä) > rámě	*męso (> *mäso) > maso
*zem'a (> *zem'ä) > země	*časъ (> *čäs) > čas
*tęti (> *t'ăt'i) > títi	*tęgnǭti (> *tähnūti) > táhnouti
*čāša (> *čăšä) > číše	*pętъkъ (> *pătek) > pátek
*devęti (> *devăt'i) > devíti	*devętъjь (> *devătý) > devátý
*dějati sę (> *d'ăt'i sä) > díti se	*smějalъ sę (> *smăl sä) > smál se
*pękъnъjь (> *päkný) > pěkný	*prisęga (> *př'īsäha) > přísaha
*tężько (> *t'äžько) > těžko	*prisężьnъjь (> *pr'isäžnȳ) > přísežný

15. The reflexes of *ě*

ě > (1) *je* after labials: **běliti* > *běliti*, **město* > *město*, **pěna* > *pěna*[5]

(2) *e* elsewhere: **sěno* > *seno*, **koleno* > *koleno*, **tělo* > *tělo*

ě̄ > (1) *é* after *l*: **lěkarʼь* > *lékař*, **melko* > *mléko*

(2) *í* elsewhere: **věra* > *víra*, **bělъjь* > *bílý*, **pěsъkъ* > *písek*

16. The development of *i* and *y*

i, *y* > *i* but the traditional orthography is retained, thus **bilъ* > *bil*, **bylъ* > *byl* are completely homophonous.

ȳ > *ej* (still written *ý*): **mъlȳnъ* > *mlýn* [*mlejn*], **dobrъjь* > *dobrý* [*dobrej*], **dȳmъ* > *dým* [*dejm*]

However, the pronunciation of *ý* as [*ī*] is still recommended in strict literary usage:

ī > *í*: **līpa* > *lípa*, **vīrъ* > *vír*, **nožīkъ* > *nožík*, **sīla* > *síla*; *í* may also undergo the *ý* > *ej* process where the preceding consonant had lost its palatalization allowing *í* and *ý* to merge completely, that is, after *c*, *s*, *z* and to a lesser extend after *č*, *š*, *ž*, *ř* and *l*. The instances of *í* > *ej* are, thus, conditioned by the chronologies and geographical extend of the various dispalatalization processes as they coincide with *ý* > *ej*. Orthographically *í* is retained as in *síto*, *cítit*, *vozík* but pronounced *sejto*, *cejtit*, *vozejk* colloquially.

17. The long mid vowels

ō > *ů*[*ū*]: **kōnʼь* > *kůň*, **dōmъ* > *dům*, **gōrъka* > *hůrka*

ē > *í*: regularly after the soft consonants *č*, *š*, *ž*, *ř*: **rekti* (> **rēci*) > *říci*, **ženъka* (> *žēnka*) > *žínka*, **pečenъka* (> **pečēnka*) > *pečínka*

ē > *é* regularly in infinitives as *nésti*, *péci*, *vésti* and in adjectival endings as *dobrého*, *dobrému* (where *ē* resulted from contraction).

Elsewhere both *é* and *í* may occur without reference to any specific environment: *kamének* or *kamínek*, *pérko* or *pírko*.

18. *aj* > *ej*

This process occurs only in closed syllables and is, thus, most noticeable in imperatives and in the superlative prefix *naj-* > *nej-*.

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[5] Note that the symbol *ě* = *[je]* after labials; elsewhere it indicates that the preceding consonant is soft: *pěna* [*pjena*], *město [mjesto* or *mnʼesto]*, *tělo [tʼelo]*. Previously any consonant + *ě* was palatalized; in standard Cz only *t*, *d*, *n* retain this palatalization whereas the dialects (especially on the NE) are more conservative.

**daj* > *dej, *volaj* > *volej, *dělaj* > *dělej* (also *dejme, dejte,* etc.) but *dělají* (because of vowel after *j*).
**najlepší* > *nejlepší, *najsladší* > *nejsladší, *najhorší* > *nejhorší*
**vajce* > *vejce* but in *vajec* (gen. plural) *a* remains.

In various instances *aj* is restored as in *najdu* (for older *nejdu*) because of *a* in *najít* (inf.); *háj, kraj* (for older *héj, krej*) because of the oblique cases (*háje, kraje,* gen.) where *aj* > *ej* did not take place.

19. Palatalization of consonants

(a) In modern Cz only *d, t, n* can be palatalized and even then only by *i, ě* and by *ę* insofar as *ę* > *e, i* or by contraction of one of these:

**dělьnikъ* > *dělník, *dě̄ra* > *díra, *divьnъjь* > *divný*
**tixo* > *ticho, *nīzъko* > *nízko, *xodite* > *chodite*
**dětę* > *dítě* but **tēgnǭti* > *táhnouti*
**tęti* > *títi* but **dętelъ* > *datel*
**dějati sę* (> **d'ějati se* > **d'āti se*) > *díti se*

(b) The history of Cz and the situation in the dialects clearly indicates that all front vowels had palatalizing power. This is seen in the development of *r* + any front vowels > *r'* > *ř*. Later dispalatalizing processes then did not affect *ř* because it was no longer a palatalized consonant.

**rēci* > *říci, *rěka* > *řeka, *ręsa* > *řasa*
**rьkǫ* > *řku, *rešeto* > *řešeto, *grьměti* > *hřměti*

Note that *r* + front vowel merges completely with *r'* < *rj: *mor'e* (*r'* < *rj*) > *moře* as in *řešeto* or *řku* (*r* + *e* or *r* + *ь*).

(c) Proto-Slavic *c* (< *tj,* 2nd and 3rd palatalization of *k*) and *z* (< *dj,* 2nd and 3rd palatalization of *g*) dispalatalize as do *č, š, ž* except after *i*. Thus, in *cizí noc, na noze, v ruce, c* and *z* are without trace of palatalization but in *čistý, šít, žít, č, š, ž* are still partially palatalized but not in *čas, šest,* or *žár*.

(d) Regarding the other palatals, *l', n', r'* < *lj, nj, rj:*

— *n'* merges with *n* + *i, ě, e* and *i* < *ę: n'* in *kůň* (*n'* < *nj*) merges with *n'* in *nitka* or *nízký* (*n* + *i* or *í*). Note, *ň* in *kůň* or *peň* is palatalized not because it was followed by *ь* but because it was already palatalized in PSl, originating from *nj*; thus, we have *peň* < **pьn'ь* vs *den* < **dьnь*. Similarly in *něho, n'* is not palatalized by *e* but by *j*, that is, *n* + *jeho*. Thus, *e* causes no palatalization in *nesu* as opposed to *nesiem* [*n'esiem*] in Slk or *niosę* in P.

— *l'* > *l* in all environments but traces are still visible: **vōl'a* > *vůle, *kl'ūčь* > *klíč*. (*a* > *e* or *u* > *i* can occur only after a soft consonant.)

— *r'* > *ř*. See *(b)* above.

(e) That labials were formerly subject to palatalization is seen by the development of a *jot* off-glide in such examples as **pętь* (> **p'et'*) > *pjet* (written *pět*), **běgati* (> **b'ehati*) > *bjehati* (written *běhati*).

(f) Weak final *ъ* at one time palatalized a preceding consonant, but this was later lost:

**kostъ > kost, *dьnъ > den, *želǫdъ > žalud*

Palatalized *d, t, n* in forms like *měď, lod', píseň,* etc. are later reintroductions by the analogy to the oblique cases. Thus, on the basis of *mědi* (gen.) or *mědí* (instr.), palatalization is reintroduced into the nominative.

20. Prosodic features

STRESS: fixed on the first syllable.

PITCH: lost at a very early date, but a remnant of the acute (rising) pitch is seen in the preservation of length from long acute vowels in initial syllables of dissyllabic forms.

QUANTITY: still distinctive in Cz but the system has undergone many shifts since Late PSl or even since the earliest attestations of Cz.

THE LONG VOWELS:

*ā > á: kráva < *kőrva, chvála < *xvālà, znáš < *znaješь*
'ā > ắ > á before *C': smál se < *smějalъ sę, žába < *žăba*
> í elsewhere: *díti se < *dějati sę, číše < *čăša*
ę̄ > ắ > á, í as *ắ < 'ā: pátek < *pętьkъ, títi < *tętі*
ě̄ > é after *l: lékař < *lěkarь*
> ię > í elsewhere: *hřích < *grě̋xъ, víra < *vě̋ra*
ē > ie > í after *C': mytí < *myt'é < *mytьje, říci < *rékti*
> é after *C°: dobré < *dobroje, nésti < *nēsti*
ū > í after *C': klíč < *kl'účь*
> ú initially: *útěcha < *ūtě̋xa*
> ou elsewhere: *moucha < *mű̋xa*
ǭ > ū > ú, ou as *ū* above: *útroba < *ǭtròba, moudrý < *mǫ́drъjь*
*ī > í: síla < *sīla, šíti < *šīti*
ý > ej (written *ý*): *mlýn < *mъlynъ*
*ō > uo > ů: dům < *domъ, kůň < *konjь*

THE SHORT VOWELS

*a > a: ruka < *rǫka*
'a > ä > a before *C': čas < *časъ*
> je (written *ě*) after labials: *země < *zem'a*
> e elsewhere: *ulice < *ulica, čeled' < *čel'adь*
ě > 'e after *t, d, n: děd < *dědъ, tělo < *tělo*
> je after labials: *běhati < *běgati*
> e elsewhere: *seno < *sěno, řeka < *rěka*

ę > *ä* > *a* before *C*° as *ä* < *'a: pata* < **pęta, maso* < **męso*
> *ě* elsewhere giving the same reflexes as *ě: těžko* < **tęžьko, jehně* < **jagnę, pět* < **pętь, kuřete* < **kurętе* vs *kuřata* < **kurętа*
e, ь, ъ > *e: neseš* < **neseši, den* < **dьnь, sen* < **sъnъ*
u > *i* after *C': líbiti se* < **l'ūbiti sę*
> *u* elsewhere: *ruch* < **ruxъ*
ǫ > *u* > *i* or *u* as above: *ulici* < **ulicu, ruka* < **rǫka*
o > *o: nositi* < **nositi*
i > *i: pivo* < **pivo*
y > *i* (written *y*): *syn* < **synъ*

SLOVAK

1. The second palatalization

k > *c:*		**kě̯₂lъjь* > *celý, *vojaki₂* > *vojaci*
g > *z:*		**nogě̯₂* > *noze*[6]
x >	(1)	*š* within a morpheme: **xě̯₂rъjь* > *šerý*
>	(2)	*s* at morpheme boundaries: **mьnixoi̯* > *mnisi, *na muxě̯₂* > *na muse* (dialectally attested)
kv > *kv:*		**kvě̯₂tъ* > *kvet*
gv > *hv:*		**gvě̯₂zda* > *hviezda*

2. The third palatalization

k > *c:*	**věnьk-* > *veniec, *učenika* > *učenica*
g > *z:*	**kъnęg-* > *kňaz, *penęg-* > *peniaz*
x > *š:*	**vьx-* > *vš-, *jelьxa* > *jelša*

3. The retention of *dl, tl* clusters

**vedla* > *viedla, *šidlo* > *šidlo, *pletla* > *plietla*

Central Slk, on which the literary language is based, simplifies *dl, tl* > *l* within morphemes but retains the cluster at morpheme boundaries. Thus, forms like *mydlo, šidlo* (instead of *mylo, šilo*) in the standard language are taken from W and E Slk where *dl, tl* are retained throughout.

4. *olt, ort* in initial position

**ôlt, *ő̂lt* > *lat:* **ôlkъtь* > *laket', *ő̂lkomъjь* > *lakomý*

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[6] In standard literary Slk the alternation *h* - *z* no longer exists. In the dative-locative singular, we now have *noha* (from *noha*), *na nohe* and in the nominative plural, *súdruh, súdruhovia* (from *súdruh*). The original situation is evident only in the documents and certain dialects.

**ôrt, *ŏrt > rat: *ôrkyta > rakyta, *ŏrm- > rameno*

Note that the vowel here is always *a* regardless of the original intonation (compare Cz *loket, rokyta*). Standard Slk uses the form *roz-* < **ôrz-* as a verbal prefix but this is a concession to E and W Slk and the older tradition based on Cz.

5. The *tort*-formula

**tort > trat: *korva > krava, *borda > brada*
**tolt > tlat: *solma > slama, *dolto > dláto*
**tert > trět: *bergъ > breh, *berza > breza*
**telt > tlět: *melko > mlieko*

6. The reflexes of *ъ̯, ь̯*

*ъ > o, a, ā, e: *vъšь > voš, *rъžь > raž, *dъždžь > dážď, *sъnъ >*
*ь > 'e, 'a, ie, o: *dьnь > deň, *lьnъ > l'an, *věnьcь > veniec, *ovьsъ > ovos*

The seeming chaos in the development of the jers is explainable in terms of dialect mixture. The most commonly encountered reflexes of strong jers in Central Slk are *ъ > o, ь > 'e*. In the northwestern part of this dialectal area there was a special development whereby if a paradigm is restructured to eliminate a mobile vowel, the resulting vowel is *a* or *á*. Thus, for example, the expected development for **mъxъ, *lьnъ* would be as follows:

**mъxъ > moch* (attested in SE Central Slk), **mъxa > mcha*
**lьnъ > len* (attested in SE Central Slk), **lьna > lna*

In NW Central Slk, however, we find the mobile vowel eliminated in favour of *a*, thus, *mach, macha; l'an, l'ana*. These and other instances of *a* < *ъ, ь* in the standard language are taken from this region.

In the SE region of Central Slk there exists another tendency whereby a mobile vowel is determined on the basis of the following consonant. If that consonant were palatal or palatalized, *e* is the preferred mobile vowel; if hard, *o* is preferred. Thus, instead of **ovьsъ > oves, *ocьtъ > ocet*, we have *ovos* and *ocot* because of hard *s, t*, or instead of **lakъtь > lakoť*, we find *laket'* because of the palatalized *ť*.

ъ > e (instead of *o*) is the regular reflex of *ъ* in both W and E Slk. Thus, forms like *sen* < **sъnъ* are either from these areas or are due to Cz influence.

Instances of *ъ, ь* developing into long vowels are rather rare and are usually of analogical origin. For example, Slk generalizes length in the genitive plural of feminine and neuter nouns, thus, *vrana* but *vrán, hlava* but *hláv, ulica* but *ulíc, mesto* but *miest*, etc.[7] The pattern of having a long vowel

[7] This length is to be expected in nouns of type-*b* and -c stress where stressed *ъ, ь* of the genitive plural would give rise to neo-acute length: **ženъ > *žénъ > *žēn > žien* (type-*b*) or **glavь >*

in the final syllable was then extended to even these forms where the final vowel is the reflex of a strong jer, that is, from *metla* we have *metiel* (< **metъlъ*); from *jamka, jamôk* or *jamiek* (< **jamъkъ*) or even from *sestra, sestier* < **sestrъ* where the insert vowel is entirely new.

Similar analogical levelings in favour of length are seen in diminutives such as *okienko* < **okēnko* (< **okъnъko*), *svetielko* < **svetēlko* (< **světьlъko*) on the basis of these forms where length resulted from the neo-acute as in **rǫčьka* > **rǫ́čьka* > *rúčka*. Length in such forms as *dážď, koniec, veniec* (< **dъždžь, *konьcь, *věnьcь* — all of type-*b* stress) could possibly have resulted from neo-acute, but such lengthenings of *ъ* or *ь*, whatever their origin may be, are extremely rare.

THE TENSE JERS

-ъj > *yj:* **dobrъjь* > *dobrý, *norъjь* > *norý*
-ьj > *ij:* **noktьjь* > *nicí, * tretьjь* > *tretí*[8]
jь- > (1) *i:* **jьgъla* > *ihla, *jьgrisko* > *ihrisko*
(2) *ø:* **jьgrati* > *hrat'*

7. *gtĭ, ktĭ, tj* > *c*

**noktь* > *noc, *světja* > *svieca*

8. *dj* > *dz*

**medja* > *medza, *rъdja* > *hrdza*

9. *sk* + FV, *skj, stj* > *šč* > *št'*

**skedrъjь* > *štedrý* [*št'e-*]

10. *zg* + FV, *zgj, zdj* > *ždž* > *žď*

**dъzdjь* > *dážď*

11. Epenthetic *l* is lost at morpheme boundaries

**kūpjenъjь* > *kúpený, *kūpja* > *kúpa*
but **pjuti* > *pl'ut'*

12. The *tъrt*-formula

**tъrt* > *tr̥t:* **gъrdlo* > *hrdlo, *kъrmiti* > *kŕmit'*
**tьrt* > *tr̥t:* **sъmьrtь* > *smrť, *mьrtvъjь* > *mŕtvy*
**tъlt* > *tl̥t:* **xъlpъ* > *chlp, *stъlpъ* > *stĺp*
**tьlt* > *tl̥t:* **dьlgъjь* > *dlhý, *dьlžьka* > *dĺžka*

Note that the contrast *tъrt* vs *tьrt* or *tъlt* vs *tьlt* is completely lost but the contrast long vs short is retained.

**glāvъ* > *hláv* (type-*c*). From here the pattern spread to noun of type-a stress such as *vrana* or *ulica*, etc.

[8] See footnote 4, p. 232.

In *črt, žrt, r̥* is occasionally lost by breaking into vowel + *r*.

**čьrnъjь (> *čŕny) > čierny, *čьrnica > černica*

but **čьrpakъ > črpák, *čьrta > črta*

**žьrn- > žarnov* but **žьrdь > žrd'*

13. The reflexes of *trъt, trьt, tlъt, tlьt*

Central Slk is unique among W Sl dialects in that *trъt* etc. develop identically without regard to whether *ъ, ь* are in strong or weak position. Thus,

	STRONG	WEAK
**trъt > tr̥t:*	**krъvь > krv*	**krъvi > krvi*
	**krъtъ > krt*	**krъta > krta*
**trьt > tr̥t:*	**krьstъ > krst*	**krьsta > krsta, *grьměti > hrmiet'*
**tlъt > tl̥t:*	**blъxъ > bĺch*[9]	**blъxa > blcha*
**tlьt > tl̥t:*	**slьzъ > sĺz*	**slьza > slza*

Note that *trъt* and *trьt* merge completely as one would expect since Slk shows no trace of *r* having ever been palatalized, but *tlъt, tlьt* also merge completely in spite of the fact that Slk still distinguishes *l* vs *l'*.

14. The nasals

*ǫ̌ > u: *blǫ̌dъ > blud*

*ǭ > ú: *lǭka > lúka*

*ę̌ > (1) 'a: *tę̌žьko > t'ažko, *grę̌da > hrada*

(2) *ä* after labials: **mę̌so > mäso, *pę̌tь > päť*

*ę̄ > ia: *tę̄gnǫti sę > tiahnut' sa, *pę̄tъkъ > piatok*

15. The reflexes of *ě*

*ě > e: *stěna > stena, *sěno > seno*

*ě̄ > ie: *rě̄ka > rieka*

16. The development of *i, y*

i merged with *y* and *ī* with *ȳ* but the distinction is maintained orthographically.

*ĭ, ў > ĭ: *sĭla > sila, *sўnъ > syn* — both *i, y* = [*ĭ*]

*ī, ȳ > ī: *krīdlo > krídlo, *rȳdzī (< *rydjьjь) > rýdzi* — both *í, ý* = [*ī*].

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[9] Note that length of *r, l* in *trъt*-formula forms is of different origins (usually secondary) than in *tъrt*. The sequence jer + *r, l* functioned as a diphthong, that is, a long vocalic segment, but *l, r* + jer as any other sequence of consonant + short vowel. Thus, in **vьrbą > vŕba*, the preservation of prestressed length is fully regular as it is in **travą > tráva* or **trǫbą > trúba*. In **slьzą > slza*, however, as in **sovą > sova* we see the normal reflex for any short vowel in this environment.

i and *í* are still used to indicate palatalization of a preceding *d, t, n* or *l,* but this is merely an orthographic convention.

17. Palatalization of consonants

(a) 1. Only *t, d, n, l* can be distinctively palatalized in Slk, but these could be palatalized by any of the PSl front vowels including weak *ъ*.

**kostъ > kost', *pętъ > päť, *bolъ > bôľ, *mědъ > med', *dьnъ > deň [d'en'], *tęžьko > ťažko, *kъnęz'ъ > kňaz, *dětę > dieťa [d'ieť'a], *nēsti > niesť [n'iesť'], *dějati sę (> *d'āti s'ä) > diať sa [d'iať'sa], *lěsъ > les [l'es], *dědina > dedina [d'ed'ina], *desętъ > desať [d'esať']*

(b) Proto-Slavic *c* (< *tj,* 2nd and 3rd palatalization of *k*), *z* (< 2nd and 3rd palatalization of *g*) and *dz* (< *dj*) all dispalatalize as do *č, š, ž* but not to the same extent as in P and not after *i.* Thus, in *cudzí* or *medza, c* and *dz* are without trace of palatalization but in *čistý, šiť, žiť* — *č, š, ž* are still partially palatalized but not in *čas, šesť* or *žuť*.

(c) Regarding the other palatals, *ľ, ň, ŕ* < *lj, nj, rj*

— *ň* and *n* + FV > *ň* which is retained throughout: *kôň* (*ň* < *nj*) merges with *ň* in *deň* < **dьnъ* vs Cz *kůň*, but *den*

— *ľ* and *l* + FV > *ľ* which is also retained: *vôľa* (*ľ* < *lj*) merges with *ľ* in *les* < **lěsъ, bôľ* < **bolъ*

— with *ŕ* (< *rj*) and *r* + FV there is no trace of palatalization whatsoever: **morje* (*ŕ* < *rj*) > *more, *rězati* > *rezať* as opposed to Cz *moře* and *řezat*

(d) There is no trace of the labials ever having been palatalized.

**kūpja* (> **kupľa*) > *kúpa* vs Cz *koupě* (*pje* < *p'e*)
**běgati* > *behať* vs Cz *běhat* (*bje* < *b'e*)

18. The prosodic features

STRESS: fixed on the initial syllable

PITCH: lost probably at a very early date

QUANTITY: still distinctive but its operation is restricted by the so-called rhythmic law whereby long vowels cannot exist in consecutive syllables. One counts from the first syllable; if it is long, the next one must be short, thus, $C\bar{V}C\bar{V} > C\bar{V}C\check{V}$ or $C\bar{V}C\bar{V}C\bar{V} > C\bar{V}C\check{V}C\bar{V}$. In Slk, *dobrý,* but *krásny* vs Cz *dobrý, krásný; volám* but *chválim* vs Cz *volám, chválím; hýbaní* (gen. plural) vs Cz *hýbání.* The Slk diphthongs count as a long syllable, thus *spievam* like *dávam.*

THE LONG VOWELS

ā > *á*: *znáš* < **znaješь, tráva* < **trāvà*

ia after soft consonants: *siať* (< **s'āti*) < **sějati, žiaľ* < **žālъ, diať* (< **d'āti*) < **dějati, čiara* < **čāra*

ę̄ > ia: *piaty < *pętъjь, tiahnut' sa < *tęgnǫti sę*
ě > ie: *rieka < *rěka, bieda < *běda, diera < *děra*
ē > ie: *niest < *nesti, riect' < *rekti, žitie (< *žit'ē) < *žitьje*
ǭ, ū > ū: *múdry < *mǭdrъjь, kl'úč < *kl'ūčъ*
ī > 'í: *dívat' sa < *divati sę, zívat' < *zivati*
ȳ > í (written *ý*): *býk < *bykъ*
ō > ŭo (written *ô*): kôň < **konjь, vôl'a < *volja*
ъ̄ > ā: *dážď < *dъzdjь*
ь̄ > ie: *veniec < *věnьcь*

THE SHORT VOWELS

a > *a:* *baba < *baba, vôňa < *vonja*
ę > a: *t'ažьko < *tęžьko, prísaha < *prisęga*
> ä after labials: *mäso < *męso, päť < *pętь*
ě > e: *stena < *stěna, seno < *sěno, les < *lěsъ*
e > e: *deväť < *devętь, nesieš < *nesēšь, zelený < *zelenъjь*
ǫ, u > u: *budú < *bǫdǭtь, rozum < *ôrzumъ*
o > o: *nos < *nosъ*
i > 'i: *divák < *divākъ, zima < *zima*
y > i (written *y*): *dym < *dymъ*
ъ > 'e, 'a, o; *ь > o, a, e* } See section 6

Note that in Slk *e* and *i* are always palatalizing vowels; therefore, this is not indicated orthographically. *'e < e, ě, ь; i < i, í < ī, ia < 'ā, ę̄; ie < ē, ě̄* — all palatalize any consonant capable of being palatalized in Slk, that is, *d, t, n, l.*

Slovak also possesses *ó* which occurs only in foreign words.

é occurs basically in foreign borrowings but also in the declension of adjectives (*dobré, dobrého, dobrému*) which is a concession to W Slk and to the older literary tradition based on Cz. Central Slk has *dobrô < *dobrojo.*

The diphthong *iu* is of morphological origin:

N. **prútьje > *prút'ē > prútie*
G. **prútьja > *prút'ā > prútia*
D. **prútьju > *prút'ū > prútiu* but *kl'úč* (not **kliuč*)

The so-called jugoslavisms of Central Slovak. In several of the sections (Nos. 1-4, 12-13), we have seen that Central Slk exhibits various features normally not expected in W Sl languages. These features plus several others to be listed below seem to connect this dialectal region of Slk with S Sl or, at least, with specific areas

of S Sl — hence the term "jugoslavisms", many of which have been incorporated into the standard language. These are the following:

(a) *x* (by 2nd and 3rd palatalization) > *s* at morpheme boundaries, not *š*, in all positions as elsewhere in W Sl (see Nos. 1, 2).

(b) *dl, tl* > *l* at morpheme boundaries (see No. 3).

(c) *ôrt, ôlt* > *rat, lat*, not *rot, lot* (see No. 4).

(d) *trъt, trъt* > *tṛt*, and *tlъt, tlъt* > *tl̥t* regardless of whether *ъ, ь* are in strong or weak position. The *ṛ* and *l̥* from these sources merge with *ṛ* < *tъrt, tьrt* and *l̥* < *tъlt, tьlt*. *ṛ* and *l̥* also retain quantitative distinctions (see Nos. 12-13).

(e) The instrumental singular ending *-ojǫ* > *oų*, not *ǭ* or *ū* as elsewhere in W Sl. The same development is attested in Old SC although now replaced by *ōm*. This ending is retained in modern Slk, and is spelled *ou* as, for example, in *ženou, tebou*. This is the same spelling as in Cz but this similarity is deceptive. In Cz every *ū* (of whatever origin) > *ou* whereas in Slk *ū* remains unchanged.

(f) The neuter nominative singular ending of long-form adjectives *-oje* > *ō* > *ų̯o*, not *-oje* > *ē* as elsewhere in W Sl. The modern Slk forms like *dobré, mladé*, etc. are based on the western dialects of Slk and influenced by Cz. Central Slk still has *dobrų̯o, mladų̯o*, etc. (cp. SC *dȍbrō, mlâdō*).

(g) *e* in the root *teb-* (dat.-loc. of personal pronoun *ty*) instead of *tob-* as is usual in W and E Sl.[10]

(h) The modern Slk instrumental singular ending *-om* (for masc. and neuterr nouns) originates, at least partially, from PSl *-omь*. In the rest of W and all of E Sl *-omь* had been replaced by *-ъmь* before the end of the PSl. Since *ъ* > *o* in part of Central Slk, could the modern ending *-om* not have developed from *-ъmь* as in E Sl? This is possible but the area in which *ъ* > *o* is much smaller than that in which *-om* is found. This fact plus some additional evidence lead us to posit the retention of *-omь* in Central Slk as in S Sl.

(i) The neuter nominative plural *á* (as plural of *mesto* = *mestá*) is paralleled by a similar feature in the Čakavian and Slavonian dialects of SC. These two dialects both preserve a distinct long rising intonation for the Late PSl neo-acute and the neuter plural *-a* in both is attested precisely with the intonation which results from a neo-acute (indicated *mestá* for Čakavian, *mestã* for Slavonian). A neo-acute lengthening in final position is unexpected since neo-acute arises as a result of a stress shift and is, therefore, a special development here. It would seem that this lengthening is a morphologically conditioned innovation, shared only by these regions of SC and Central Slk.

(j) Generalization of *ē* as a theme vowel in verbs of the type *nesēšь, pletēšь*, etc. giving Slk *nesieš, pletieš* and SC *nèsēš, plètēš* as opposed to Cz *neseš, pleteš*.

(k) Several other "jugoslavisms" occur in Central Slk which are insignificant in themselves but when considered with all those mentioned above — add

[10] Russian *tebe* instead of *tobe* is a northern innovation appearing in the XV century; *tabe* < **tobě* still occurs in many S R dialects.

weight to the general contention that Central Slk at one time formed some sort of transitional dialect between W and S Sl.

To this group of features may be added the following:

— The first person plural form ending in *o*, as in SC *ìdēmo, nȍsīmo, známo* or Sln *grẹ́mo, nọ́simo, znâmo,* also occurs in Central Slk but only in the southeastern corner.

— As in S Sl *jь-* develops consistently to *i-*, not *je-* as in Cz nor are there many examples of *jь* > *ø* as in P or Ukr. However, this feature is attested in almost all of Slovakia and does not coincide with the other jugoslavisms.

— All formerly long vowels with acute intonation shorten as in SC and Sln but this may be mere coincidence, for Lekhitic underwent the same process.

A Comparison of Czech and Slovak

	Proto-Slavic	*Czech*	*Slovak*
1.	k + 2nd and 3rd palat.	c	c
	g	z	z
	x	š	š, s *at morpheme boundaries*
	kv	kv	kv
	gv	hv	hv
2.	dl	dl	dl } l *in roots in Central Slk*
	tl	tl	tl }
3.	ŏrt	rát	rat
	ôrt	rot	
	ŏlt	lat	lát
	ôlt	lot	
4.	tŏrt	trát	trat
	tôrt	trat	
	tŏlt	tlát	tlat
	tôlt	tlat	
	tĕrt	trět > třít	třet > tret
	têrt	trět > třet	
	tĕlt	tlět > tlét	tlět > tlet
	têlt	tlět > tlet	
5.	ъ	e	o, a, á, e
	ь	e	'a, 'a, ie, o
6.	ьj, yj	yj, ý	yj, ý
	ьj, ij	ij, í	ij, í
	jь-	ø, je-	ø, i-
7.	tj, ktĭ, gtĭ	c	c
8.	dj	z	dz
9.	stj, skj, sk + FV	št', št	št'

	Proto-Slavic	*Czech*	*Slovak*
10.	zdj, zgj, zg + FV	žd', žd	žd'
11.	*epenthetic* l'	*lost*	*lost*
12.	tr̥t, tr̥t tr̥t, tr̥t	trt	trt tŕt
	č, žr̥t	č, žert	č, žŕt, č, ž + vowel + rt
	tl̥t, tl̥t	tlut	tlt
	tl̥t, tl̥t	tlout	tĺt
	pl̥t, pl̥t	pl̥t	pĺt, plt
13.	tr̥t	tret	
	tr̥t	třet	
	tr̥t	trt	trt
	tr̥d	trd	
	tr̥p, k	třp, k	
14.	tl̥t	tlet	
	tl̥t		tlt
	tl̥t		
	tl̥t	tlt	
15.	ǫ̆ > ŭ	u	ú
	ǭ > ū	ou, ú *in initial position*	
	t'ǫ̆ > t'ŭ	ti	t'u
	t'ǭ > t'ū	tí	t'ú, tiu *(morphologically conditioned only)*
16.	ę̆ + *hard consonant*	a	'a } *after* t, d, n, l; a *elsewhere*
	ę̆ *elsewhere*	'e *after* t, d, n*	'a }
		je *after labials**	ä
		e *elsewhere*	'a *or* a *as above*
	ę̄ + *hard consonant*	á	ia
	ę̄ *elsewhere*	'í	
17.	ě	'e *after* t, d, n*	'e *after* t, d, l, n
		je *after labials**	e *elsewhere*
		e *elsewhere*	
	ě	é *after* l	ie
		í *elsewhere*	
18	'ă + C' -ă *(finally)*	e	a
	'ă *(elsewhere)* ă	a	
	'ā + C	í	ia
	-'ā *(finally)*		ia
	'ā *(elsewhere)*	á	á
	ā		
19.	ō	ů	ô [ŭo]
20.	ē	í *after* č, š, ž, ř	ie, é *(occurs only in adjectival endings)*
		é *elsewhere but frequently alternating with* í	

	Proto-Slavic	*Czech*	*Slovak*
21.	aj	aj > ej aj + vowel > aj	aj
22.	i, y	i**	i**
	ī	í *(sometimes* e̯j*)*	í**
	ý	e̯j *(written ý)*	
23.	rj > r' r + any FV	ř	r
	lj > l'	l	l'
	nj > n'	ň	ň
	Overall palatalization by front vowels	d, t, n + i, í (< ĭ, ī) + 'e (< ě, ě) + í (ī, ē, ě)	d, t, n, l + i, í (< i, ī) + 'e (< ě, ě, ь) + 'a (< ě, ь) + ia (< ē', 'ā) + ie (< ē, ě) + ø (< weak ь)
	labial + ě, ě, 'ă	p'e, b'e, v'e > pje, bje, vje m'e > mje *or* mn'e	p, b, v, m + e *or* a
24.	VjV	V	V
	old acute length	*retained in forms under three syllables*	*lost entirely*
	old circumflex length	*lost*	*lost*
	neo-acute length	*retained*	*retained*
	prestressed length	*retained*	*retained*
	CVC, VCV, *etc.*	*retained*	*second of two consecutive long vowels shortens (rhythmic rule)*

* Orthographically these are all indicated by means of *ě*.

** Both Cz and Slk maintain the older distinction orthographically, writing *i, í* for PSl ī and *y, ý* for *ȳ*.

POLISH

1. The second palatalization

   k > c: **kě₂na > cena; *kě₂lъjь > cały*
   g > dz: **na nogě₂ > na nodze*
   x > š: **matjexě₂ > macosze* (dat.); **xě₂rъjь > szary*
   kv > kv: **kvě₂tъ > kwiat*
   gv > gv: **gvě₂zda > gwiazda*
   sk > šč: **skě₂riti > szczerzyć; *vъ polьskě₂ > w Polszcze* (Old P), now *w Polsce*

2. The third palatalization

   k > c: **xolpьk- > chłopiec*
   g > dz: **mosęg- > mosiądz*
   x > š: **vьx- > wszystko*

3. The retention of *dl, tl* clusters

   **mydlo > mydło, *vědlъ > wiódł, *plětlъ > plótł*

4. *olt, ort* in initial position

   **ôlt, *ôrt > lot, rot*
   **ŏlt, *ŏrt > lat, rat: *ŏrdlo > radło* but **ôrsti > róść* (now *rosnąć*)
   **ŏlknǫti > łaknąć* but **ôlkъtь > łokieć*

5. The *tort-* formula

   **tort > trot:* **borda > broda, *morzъ > mróz*
   **tolt > tlot:* **moltъ > młot, *solma > słoma*
   **tert > tr'et:* **bergъ* (> **br'egъ*) > *brzeg*
   **telt > tl'et:* **melko > mleko*

   In *telt* there is a backing of the vowel after palatals (from the 1st palatalization of velars). Thus,

   **šelmъ* (> **šolmъ*) > *szłom, *želbъ* (> *žolbъ*) > *żłób*

   The later Lekhitic *e > 'o* is also reflected:

   **berza* (> **br'eza*) > *brzoza, *serda* (> **sr'eda*) > *środa, *pelnъ* (> **pl'enъ*) > *plon*

   Note the following modifications:

   śrz > śr: *środa* for Old P *śrzoda* < **sr'edo* < **serda*
   żrz > źr: *źródło* for Old P *źrzódło* < **žr'ĕdlo* < **žerdlo*
   czrz > trz: *trześnia* for Old P *czrzesznia* < **čeršьn'a*

6. The reflexes of *ь, ъ*

   ъ > e: **sъnъ > sen, *domъkъ > domek, *vъšь > wesz*

ъ > *'e:*		**vъsъ* > *wieś*, **pъsъ* > *pies*, **dьnь* > *dzień*
ъj > *yj:*		**dobrъjь* (> **dobryjь*) > *dobry*, **čьrnъjь* > *czarny*
ьj > *ij:*		**tretьjь* > *trzeci*,[11] **šьja* (> **šija*) > *szyja*
jь >	(1) *i:*	**jьgьla* > *igła*
	(2) *ø:*	**jьgrati* > *grać* and *igrać*, **jьz* > *z*

7. The reflexes of *tj, ktī, gtī* > *c*

   **noktь* > *noc*, **mōgti* > *móc*, **platjenъjь* > *płacony*

8. The reflex of *dj* > *dz*

   **medja* > *miedza*, **xodjǫ* > *chodzę*

9. The reflex of *stj, skj, sk* + FV > *šč*

   **pustjenъjь* > *puszczony*

10. The reflex of *zdj, zgj, zg* + FV > *ždž*

    **jězdjǫ* > *jeżdżę*, **zagnězdjenъjь* > *zagnieżdżony*

11. Loss of epenthetic *l* at morpheme boundaries but the labial retains its palatalization

    **kupjenъjь* > *kupiony*, **zemja* > *ziemia* but **pjuti* > *pluć*

12. The *tъrt*-formula

**tъrt* > *tart:*	**gъrdlo* > *gardło*, **tъrgъ* > *targ*, **kъrčьma* > *karczma*
**tъrt* > *tart*	when hard dental follows *r*: **mьrtvъjь* > *martwy*, **tvьrdъjь* > *twardy*, **čьrnъjь* > *czarny*
**tъrt* > *t'er't*	when a velar or labial follows *r* but there are many exceptions: **vьrba* (> **v'er'ba*) > *wierzba*, **vьrxъ* > *wierzch* but **sьrpъ* > *sierp*, **čьrvь* > *czerw* or with vacillation as in **pьrvъjь* > *pirzwy, pirwy* (now *pierw* + *szy*).[12]

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[11] Unlike Cz or Slk, P is not so consistent in contraction of *VjV*. There is no clear evidence either documentary or dialectal indicating contraction in verbs of the type **pьjǫ, *pьješь; *šьjǫ; *bьjǫ*, etc. If this is so, then *i* or *y* in modern P *piję, pijesz; szyję; biję*, etc. are legitimate examples of *i* < *ɓ*. The problem is that *ɓ* here is in weak position and should disappear if there is no contraction. On the other hand, *ɓ* would have been in strong position in the imperatives *pij, bij, szyj* < **pьjь, *bьjь, *šьjь*. Therefore, *i* in these forms are direct correspondences to R *pej, bej, šej* or Ukr *pyj, byj, šyj* but only if there had never been contraction in P. In the examples *dobry, czarny* or *trzeci* contraction did indeed occur but later *ý* and *í* shortened. Only Kashubian still distinguishes *ĭ* vs *ī* or *ў* vs *ȳ* as in *ləs* vs *sin* where *ə* < *ĭ*, *ў* vs *i* < *ī*, *ȳ* and in adjectives the nom. sing. ending is *i*, indicating length, thus, *ləxi* < **lĭxȳ* < **lixъjь*. The nature of the vowel itself indicates that *ъ* or *ь* + *j* developed as *y* or *i*. See footnote 4, p. 232.

[12] In point of fact, the forms now containing *e* + *r*, or *e* + *rz* (< *r'*) are the result of a later change. Originally all these forms had *i* + *r*, *r'* for every *i* in this environment lowers to *e*.

**tъrt > t'ert*	in other environments: **sъmъrtь > śmierć, *tvъrditi > twierdzić*[13]
**tъlt > tłut*	when a dental precedes *ъl: *tъlmačь > tłumacz, *sъlnьce > słuńce* (Old P) *> słońce, *stъlpъ > stłup > słup*
**tъlt > tołt*	when a labial precedes *ъl: *mъlva > mołwa* (Old P) *> mowa*
**tъlt > telt*	when a velar precedes *ъl: *kъlbasa > kiełbasa, *xъlmъ > chełm*
**tъlt > tłut*	when a dental precedes *ъl: *dъlgъjь > długi, *tъlkti > tłuc*
**tъlt > tolt*	after *č, ž: *žъltъjь > żółty, *čъlno > czółno, *čъlgati > czołgać*[14]
**tъlt > telt*	(after labials and before hard dentals): **pъlnъjь > pełny, *vъlna > wełna*
**tъlt > t'il't*	(elsewhere after labials): **vъlkъ > wilk, *mъlčati > milczeć*

13. *trъt, trьt, tlъt, tlьt*

The developments here are fairly regular. That is, in strong position, the jers vocalize as elsewhere and in weak position the jers are dropped, but this latter development gives rise to such consonant clusters that, in turn, often undergo various simplifications.

**krъvь > krew, *krъvi > krwi, *plъtь > płeć, *plъti > płci, *drъžati > drżeć, *grъměti > grzmieć, *slъza > *słza > łza, *blъxa > *blxa > *plxa > pchła, *klьne > klnie*

14. The nasals (see pp. 129-30)

*ę̌ > 'ę: *pę̌tь > pięć*
*ę̄ > 'ą: *pę̄tъjь > piąty, *mēsęcь > miesiąc*
*ǫ̌ > ę: *krǫ̌to > kręto*
*ǭ > ą: *trǭba > trąba*

15. The reflexes of *ě*

ě > (1) *'a* (before hard *t, d, s, z, n, l, r*): **bělъjь > biały, *věra > wiara, *město > miasto*
ě > (2) *'e* (in other environments): **běliti > bielić, *věriti > wierzyć, *vъ městě > w mieście*

[13] See footnote 12.

[14] Since *č, ž* and *š* constitute a natural phonological group, one would logically expect syllables beginning with *š* to belong here also, but syllables of the type **šъlk* are not attested at all in P.

16. *i* and *y*

(1) *i* > *'i*, that is, remains a high front palatalizing vowel: **biti* > *bić*, **godina* > *godzina*

(2) *i* > *'e* before *r*: **sirota* > *sierota*, also **tьrt* > **tirt* > *t'ert* (see footnotes 12-13)

(3) *i* > *y* after *č, š, ž, ř* < *r'*: **čijь* > *czyj*, **šiti* > *szyć*, **žito* > *żyto*, **krivъjь* > **křivy* > *krzywy*

(1) *y* > becomes a front vowel but somewhat lower and less fronted than *i*: **byti* > *być*

(2) *y* > *e* before *r*: **syrъ* > *ser*, **pastyrъ* > *pasterz*

(3) *y* > *i* after *k, g*: **rǫky* > *ręki*, **gybnǫti* > *ginąć*

17. Palatalization of consonants

(a) All PSl front vowels including weak *ь* palatalized any preceding consonants.

**kostь* > *kość*, **pьnь* > *pień*, **vьsь* > *wieś*, **dьnь* > *dzień*
**mědь* > *miedź*, **galǫzь* > *gałąź*, **tęžьko* > *ciężko*, **děti* > *dzieci*

Often this palatalization is lost after the loss of weak jers brought about new consonant clusters, thus, **tьneši* > **t'ьn'ešь* > **t'n'eš* > *tniesz* but **prosьba* > **pros'ьba* > *prośba*.

(b) The PSl palatals *č, š, ž, dž* and the Lekhitic *c* (< *tj*, 2nd and 3rd palatalization of *k*), *dz* (< *dj*, 2nd and 3rd palatalization of *g*) all dispalatalize. See also *(e)*.

miedza < **m'edz'a*, *w ręce* < **vъ rǫc'ě*, *zając* < **zajęc'*
czysto < **č'isto*, *żyto* < **ž'ito*, *szary* (< **šarȳ*) < **š'ěrъjь*

(c) Proto-Slavic *l', n', r'* < *lj, nj, rj* merged with *l', n*, and *r* + a front vowel.

— *ń* in *koń* (*n'* < *nj*) is the same as in *dzień* (*n'* < *n* + *ь*) and palatalized *n* is retained throughout.

— *l* in *kłucz* (*l* < *lj*) is the same as in *laskà* (*l* + *ě*) but the former *l'* has now dispalatalized everywhere except before *i* as in *lipa [l'ipa]*. There is, however, no merger with *l* because *l* > *ɫ* (written *ł*). That is, the former *l'aska* vs *laska* is now replaced by *l* vs *ɫ* (orthographically *laska* vs *łaska*).

— *rz* in *morze* (*rz* < *rj*) is the same as in *rzeka* (*r* + *ě*). This *r'* of both sources > *ř* (as in Cz) but was written *rz*. Later *ř* > *ž* but the traditional spelling is retained.

(d) Labials palatalize not only before front vowels but also where epenthetic *l* was lost.

**zemja* (> **z'eml'a*?) > *ziemia*, **kupjenъjь* (> **kupl'enȳ*?) > *kupiony*

All labials dispalatalize in final position:

**golǫbъ* (> **golǭb'*) > *gołąb* but **golǭbьmъ* (> **golŏb'em'*) > *gołębiem*

(e) *d'* > *dź*, *t'* > *ć*

Note that the nonpalatalized dental affricates in P are of PSl or early Lekhitic origin whereas *dź* and *ć* are of later origin.

**medja* > *miedza* vs **dělo* > *działo*
**světja* > *świeca* vs **na světě* > *na świecie*
**kělъjь* > *cały* vs **tělo* > *ciało*
**mosęg* > *mosiądz* vs **mědь* > *miedź*

(f) *k* and *g* (but not *x*) palatalize before the new front vowels:

ky, gy > *ki, gi* > *k'i, g'i: *rǫky* > *ręki, *nogy* > *nogi*
kъ, gъ > *ke, ge* > *k'e, g'e: *kъdy* > *kiedy; -*koje, -*goje* > *kē, gē* > *k'e, g'e* in such forms as **takoje* (> **takē*) > *takie* where a contraction produced a new front vowel.

18. The prosodic features

STRESS: fixed on the penultimate syllable
PITCH: lost at a very early (probably prehistoric) date
QUANTITY: lost in the later fifteenth or early sixteenth century. In literary P, of all the formerly long vowels, only *ō, ę̄, ǭ* developed in any way differently from their short counterparts. All other formerly long vowels merge with their short correspondents. Thus,

ō > *u* (written *ó*): **nōžь* > *nóż [nuš]*
ŏ > *o: *nŏsъ* > *nos, *stŏly* > *stoły*
ę̄ (> *'ą̄*) > *'ǫ* (written *ią*): **p'ę̄tȳ* > *piąty*
ę̆ (> *'ą̆*) > *'ę* (written *ię*): **p'ę̆tь* > *pięć*
ǭ (> *ą̄*) > *ǭ* (written *ą*): **mǭka* > *mąka*
ǫ̆ (> *ą̆*) > *ę* (written *ę*): **zǫ̆by* > *zęby*

but *ă* and *ā* > *a; ĕ* and ē > *e; ĭ* and *ī* > *i; y̆* and ȳ > *y; ŭ* and *ū* > *u*. In the dialects, however, the situation is very different where traces of the former long vs short opposition are well attested. (See pp. 198, 216.)

The Lekhitic soundshift. Several P developments described above occurred under the same conditions. Namely, *tьrt* > *tъrt, ę* > *'ǫ, e* > *'o,* and *ě* > *'a* when followed by a hard dental. That is, each change involves the backing of vowel under the same conditions, and all these processes taken as a whole are known as the Lekhitic soundshift (*przegłos lechicki*) or sometimes merely as the *Polish soundshift* in textbooks dealing specifically with the phonological history of that language. These processes reached their greatest intensity in the eastern and southeastern wing (that is, in Proto-Polish) of Lekhitic but all areas of Lekhitic

undergo most phases of it. Particularly interesting is the fact that quite often the Lekhitic soundshift spilled over into the Lusatian area, especially into those dialects (now extinct) of LL east of the Neisse River, in what is now Poland. All Lusatian dialects in this area are clearly related to LL; there is no trace of any sort of UL east of the Neisse.

IN THE LEKHITIC AREA

1. *tъrd* > *t'ъrd* in the western wing of Lekhitic but *tъrd* > *tъrd* in P. The dividing line is Kashubian which has both. Thus, in P **tvъrdъjь* > *twardy* but *cv'ardi* in Kashubian where *v* is still palatalized and *t* can develop to *c* only as the result of palatalization.

2. *ę* > *'ǫ* occurred everywhere in Lekhitic but later developments in P have erased this feature.

3. *ę* > *'o* occurred in the eastern wing of Lekhitic but not in the west. It is unattested in either Polabian or the Pomeranian dialects.

4. *ě* > *'a* is attested in all areas of Lekhitic.

IN THE LUSATIAN AREA

1. *tъrd* > *tъrd* (not *t'ъrd*) occurred in all of UL and LL. Later *tъrd* > *tard* in LL but *tord* in UL and as such are incorporated into the literary languages. This is the only part of the Lekhitic soundshift to be reflected in UL.

2. West of the Neisse *ę* > *'ǫ* > *'u* is now found only in the Mužakow (Muskau in German) region, a transitional dialect between LL and UL. It is also attested in an early seventeenth century manuscript from a village Atterwasch, near Guben (now Wilhelm Pieck Stadt), northeast of Cottbus where LL is no longer spoken. This is puzzling, for the documents from east of the Neisse River show a mixed pattern. Those from the south (that is, opposite Mužakow)[15] show it clearly and abundantly but those from the north (opposite Atterwasch) do not have it. This, however, may be due to the paucity and/or inaccuracy of the documentation.

3. *e* > *'o* in the extinct eastern LL dialects (both north and south) much more closely parallels the developments in P than in more westerly dialects of LL on which the literary language is based.

4. *ě* > *'a* is clearly and abundantly attested in the extinct eastern dialects of LL, in the transitional Mužakow dialect (much more clearly than *ę* > *'ǫ* > *'u*) and also from Luboraz (Luberose in German), north and west of Cottbus where LL is no longer spoken.

[15] This dialect is fairly well preserved for us in a translation of the entire New Testament completed in 1548 by M. Jakubica, a Lutheran pastor but remained in manuscript form until 1967 when it was published for its historical linguistic value. This remarkable cultural achievement could have played a crucial role in building ethnic identity and helping to stem Germanization of the Protestant Lusatians. Present research would place Jakubica's dialect in modern Poland between the Neisse and Bóbr Rivers most probably in the region south of the city of Lubsko.

UPPER LUSATIAN

1. The second palatalization

   k > *c*: **kě₂lъjь* > *cyły*, **vъ rǫkě₂* > *w ruce*
   g > *z*: **na nogě* > *na noze*
   x > *š*: **xě₂rъjь* > *šěry*, **na muxě₂* > *na muše*
   kv > *kw*: **kvě₂tъ* > *kwět*
   gv > *hw*: **gvě₂zda* > *hwězda*
   sk (> *šč* > *št'*) > *šć*: **skě₂riti* > *šćěrić*

2. The third palatalization

   k > *c*: **ovьka* > *wowca*, **otьk-* > *wótc*
   g > *z*: **mosęg-* > *mosaz*
   x > *š*: **vьx-* > *wšón*

3. *dl, tl* are retained

   **pletlъ* > *pletł*, **metlъ* > *mjetł*
   **mydlo* > *mydło*, **ědlъ* > *jědł*

4. The *ort-, olt*-formulae

   **ŏrt-, *ŏlt-* > *rat-, lat:* **ŏrdlo* > *radło*, **ŏlkomьcь* > *łakomc*
   **ôrt-, *ôlt-* > *rot, lot:* **ôrsti* > *rosć*, **ôlkъtь* > *łochć*

5. The *tort*-formulae

   **tort* > *trot:* **vŏrna* > *wróna*, **borda* > *broda*
   **tert* > *tr'et:* **bĕrza* > *brěza*, **dêrvo* > *drjewo*, **bêrgъ* > *brjóh*
   **tolt* > *tłot:* **golva* > *hłowa*, **kŏlda* > *kłóda*
   **telt* > *tl'et:* **velkti* > *wlec*, **melko* > *mloko*

6. The reflexes of *ь̨*, *ъ̨*

   ь̨ > *'e* when followed by a palatalized consonant
   ь̨ > *'o* when followed by a hard consonant

   **dьnь* > *dźeń*, **pьnьkъ* > *pjeńk*, **kozьlъ* > *kozoł*, **osьlъ* > *wosoł*, **orьlъ* > *worjoł*, **lъgъkъjь* > *lochki*

   ъ̨ > *e* when followed by a palatalized consonant
   > *o* when followed by a hard dental or with a contiguous labial

   **dъzdjь* > *dešć*, **krъvь* > *krej*, **mъxъ* > *moch*, **vъšь* > *woš*, **vъzьmǫ* > *wozmu*, **sъnъ* > *són*, **krъtъ* > *knot*, **rъtъ* > *rót*
   but **dъska* > *deska*, **tъpъtati* > *teptać*

   jь > *ø* in weak position: **jьměti* > *měć*, **jьgrati* > *hrać*
   > *je* in strong position: **jьgъla* > *jehła*
   ьj > *ij* **pьjь* > *pij*, **božьjь* > *boži*, **tretьjь* > *třeći*
   ъj > *yj:* **bosъjь* > *bosy*

As in P, the presence of *i* or *y* implies contraction and a later shortening of *ī* or *ȳ*. See footnote 11, p. 249.

Strong jer + *k, c, t, s* is lost in final syllables:

**xlopьcь > chłopc, *domъkъ > domk, *pьnьkъ > pjeńk, *vъnučьkъ > wnučk, *nogъtь > nochć* (formerly spelled *nohć*), **osъtь > wóst, *ovьsъ > wows*

7. Reflexes of *tj, ktĭ, gtĭ > c*

**mogti > móc, *tjudjьjь > cuzy*
**noktь > nóc, *světja > sweca*

8. Reflex of *dj > z*

**medja > mjeza, *sadja* (> **saza*) > *sazy* (plural)

The expected *c, šć* < *tj, stj*, or *z, ždź* < *dj, zdj* have been eliminated at morpheme boundaries in verbs, thus, *płaću, čisću, chodźu, hnězdźu* by analogy to forms where *t, st, d, zd + i > ć, sć, dź, zdź*. See No. 24 (c).

9. *stj, skj, sk* + FV > *šć*

**městjanъ > měšćan, *puskěti > pušćeć, *ogniskjo > wohnišćo*

10. *zdj, zgj, zg* + FV > *ždź*

**drozgьje > droždźe* but **ězdję > jězdźu*
**dьzdjь* (> **deždź*) > *dešć*

11. Epenthetic *l* is lost at morpheme boundaries

**zemja > zemja, *gubję > hubju*

12. The *tьrt*-formula

**tьrt > tort:* **kъrčьma > korčma, *kъrmiti > kormić, *gъrdьjь > hordy, *gъrdlo > hordło, *tъrgati > torhać*
**tьrt > tort* when hard dental follows *r*
**tьrt > t'ert* elsewhere

Originally *r* was hard only before dentals; *r'* — before labials and velars:

**čьrnъjь > čorny, *čьrvь* (> **čer'vь*) > *čerw, *zьrno > zorno, *vьrba* (> **v'er'ba*) > *wjerba, *pьrstъ > porst, *sьrpъ > serp, *sьmьrtь > smjerć*

**tьlt > tołt:* **gъlkъ > hołk, *dьlgъ > dołh, *kъlbasa > kołbasa*
**tьlt > tołt* when a hard dental follows *l* or when a dental precedes the *ьl*
**tьlt > t'elt* elsewhere

**pьlnъjь > połny, *dьlgъjь > dołhi, *tьlkti > tołc, *pьlniti > pjelnić, *vьlkъ > wjelk, *mьlčati > mjelčeć, *čьlnъ* (> **čołn*) > *čołm, *žьltъjь > žołty, *žьlčь > žołč*

In forms like *polny, tołc*, there is no trace of palatalizing of the consonant preceding *ъl*. Therefore, the *ъ* must have backed at a fairly early date, thus, **pьlnъ, *tьlci* > **pъlnъ, *tъlci*. Strong *ъ* > *o* is expected in UL whereas we cannot assume *o* < *e* or *ь* in these examples. In the latter case the consonant preceding the new *o* is (or was) palatalized as in *worjoł* < **orьlъ* or *ćopły* < **teplъjь*. In the case of *žołty,* however, it is not exactly clear whether we are to posit **žьltъjь* > **žъltъjь* > *žołty* or **žьltъjь* > **żełty* > *żołty. żołč* < **žьlčъ* would indicate an overall backing of *ьl* > *ъl* after *č, š, ž,* regardless of the palatal *č* following. (See pp. 180-1.)

13. The *trъt*-formula

trъt, trьt, tlъt, tlьt develop fairly regularly. That is, when in strong position, *ъ* and *ь* vocalize; in weak position, they disappear. This dropping of weak jers then gives rise to various clusters which often undergo simplification, vowel insert or restructuring, each lexical item having its own individual history.

**krъvь* (> **krew'*) > *krej* vs **krъvavьnъjь* > *krawny* and *krwawny, *krъtъ* (> **krot*) > *knot* vs **drъžati* > *ržeć, *krъstiti* > *křćić, *grъmotъ* > *hrimot, *xrъbьtъ* > *chribjet, *trъstina* > *ścina, *blъxa* (> **blxa* > **bxa*) > *pcha, *slьza* > *sylza, *jablъko* > *jabłuko*

14. *i* and *y*

i and *y* are considered now as variants of one phoneme, but they remain, as in R, phonetically distinct, *i* being a high front vowel and *y* a front mid-high vowel similar to P *y* but somewhat more backed.

i > *y* after *s, z, c: *zima* > *zyma, *rězьnici* > *rěznicy, *voziti* > *wozyć, *prositi* > *prosyć* because *z', c', s'* > *z, c, s*

> *'i* retained elsewhere: **piti* > *pić, *lipa* > *lipa, *sъměniti* > *změnić, *čisto* > *čisto* because *p, l, n, č,* etc. are palatalized

y > *i* after velars: **rǫky* > *ruki, *kyvati* > *kiwać, *gybati* > *hibać, *nogy* > *nohi, *xyliti* > *chilić, *suxъjь* (> **suchy*) > *suchi*

vy > *wu* in initial position: **vymazati* > *wumazać, *vyměriti* > *wuměrić* but **vysokъjь* > *wysoki* (literary), *wusoki* (colloquial)

y is retained elsewhere: **dymъ* > *dym, *synъ* > *syn*

15. The nasals

ǫ > *u:* **dǫbъ* > *dub, *nǫdja* > *nuza, *berǫ* > *bjeru*

> *y* in the verbal formant *-nǫti: *tęgnǫti* > *ćahnyć* (infinitive), **tęgnǫlъ* > *ćahnył* (participle) but **tęgnǫ* > *ćahnu* (1st person sing.)

ę > *'a:* **měsęcъ* > *měsac*, **gręda* > *hrjada*, **męso* > *mjaso*, **měrętji* > *měrjacy*

> *'e* between palatalized consonants. This is the same change as experienced by *a* of any other source: **devętьjь* > *dźewjaty* vs **devętь* > *dźewjeć* as in *rukami* vs *dušemi*, *kosćemi*

> *'o* in final position: **telę* > *ćelo* but **telęte* > *ćeleća*, **telęta* > *ćelata*, **ramę* > *ramjo*, **xvalę* > *chwalo*, **sę* > *so* but **tę* > *će*, **mę* > *mje*. (The feature may be of morphological origin, see pp. 177-9.)

16. The reflexes of *ě*

ě > *y* after *c*, *s*, *z* in initial syllables: **čělъjь* > *cyły*, **sěno* > *syno*, **zěvati* > *zywać*

> *ě* elsewhere in initial syllables: **rěka* > *rěka*, **měra* > *měra*

> *'e* in all other environments: **koľěno* > *koleno*, **vъ rǫcě* > *v ruce*, **neděl'a* > *njedźela*

17. The *'e* > *o* alternation

'e > *'o* before hard consonants and in final position but not consistently: **ledъ* > *lód*, **čerslo* (> **čr'eslo*) > *črjósło*, **klenъ* > *klon*, **čelo* > *čoło*, **žena* > *žona*, **jezero* > *jězor*, **melko* (> **ml'eko*) > *mloko*, **bergъ* (> **br'eh*) > *brjóh*, **smerkъ* (> **smr'ek*) > *šmrjók* and *šmrěk*, **teplъjь* > *ćopły*, **sestra* > *sotra*.

Counterexamples: **medъ* > *měd*, **zelenъjь* > *zeleny*, **popelъ* > *popjeł*, **rebro* > *rjebło*, **pero* > *pjero*, **šestъjь* > *šesty*, **veslo* > *wjesło*

In final position: **pol'e* > *polo*, **lice* > *lico*, **pletje* > *pleco*, **sъbožьje* > *zbožo* and *zbože*, **zelьje* > *zelo*, **ogniskjo* > *wohniśćo* but **mytьje* > *myće*, **prošenьje* > *prošenje*, **nesete* > *njeseće* (however, in western dialects — *myćo*, *prošenjo*, *njesećo*)

Given such a range of contradictory examples, it is not difficult to understand why *'e* > *'o* in UL remains an unsolved problem. What's more, it is clear from the dialects that there still exist several competing systems within this very small area. It may well be that there never existed a single set of phonological rules for *'e* > *'o* for all of UL but that this area was always divided even in PSl times into two or more dialects as far as the *'e* > *'o* feature is concerned. It is, however, generally agreed that *'e* > *'o* wherever it occurred arose as a phonetically conditioned process giving rise to this alternation in both derivation and inflection as still seen in P *wesoły* vs *weselić*, *niosę*, *niosła* vs *niesie*, *nieśli*. In UL *'e* > *'o* is extremely rare in derivation (*wjesoły*

vs *wjeselić*) and has been eliminated completely in inflection (*njesu* and *njese*, *s* < *s'*).[16]

Thus, we cannot explain in phonetic terms why **ledъ* > *lód* but **medъ* > *měd* (cp. P *lód, miód;* R *m'od, l'od*). We assume, therefore, that **medъ* > **m'od* but *'o* is eliminated later by analogy to these forms like **medьn-* > *mědny* (adjective) or the locative **medě* > *mjedźe* (instead of the older *medu*) in which *d* was palatalized and *'e* > *'o* would not occur. However, *lód* also possessed similar forms as **ledьn-* or **ledě* > *lódny, lodźe*. It is impossible to say why *e* would be generalized in all forms of one root (*měd*) but *o* in another (*lód*). Each root has its own specific history with *o*-forms predominating in the west and *e*-forms in the east.

On the other hand, in forms like *stoléćo* vs *myće* (both literary) < **stolětьje, *mytьje*, or *pječećo* (dialectal) vs *pječeće* (literary) < **pečete,* we must assume that in certain dialects, *-e* was preserved in final position. If this were not so, then final *e* in such morphological categories as cited would have disappeared completely and there would have been no analogical basis for reestablishing *e*-forms.

The confusion of forms with *e* or *o* has had an interesting side effect in that etymological *o* can be replaced by *e* when the former is followed by a soft consonant, thus, **stọjati* > *stejeć* or *stojeć, *lomiti* > *lemić, *topiti* > *tepić, *soliti* > *selić, *kropiti* > *krjepić, *dojiti* > *dejić* or *dójić* but *rojić* < **rojiti, poćić so* < **potiti sę, łojić* < **loviti, krojić* < **krojiti.*

18. *a* > *e* between palatal(ized) consonants

This refers to *a* of any source and *palatalized* refers to these segments still palatalized in ca. sixteenth or seventeenth centuries.

zarjad (nom.) vs *w zarjedźe* (loc.): *a* < *ę*
rukami vs *dušemi* (instr.) < **dušami [duš'am'i]*
rěznikami vs *přećelemi* < **přećelami*

l + *a* was still palatalized but *wowcami, mosaz* < **ovьcami, *mosęz'ъ* because *c, z* (< 3rd palatalization of *k, g*) had lost their PSl palatalization.

dźesać vs *dźewjeć* < **desętь, *devętь: s* could no longer be palatalized but *w* was and is to this day.

pjaty vs *pjeć* < **pętьjь* vs **pętь*
mjasć, mjatu vs *mjećeš* < **męsti, *mętǫ, *męteš*
nošach vs *nošeše* (< **nošaše*) < **nošaaše*
dobraj wołaj vs *lěpšej konjej* (nom. dual with *j* affixed to original *a* as a specific UL innovation)

[16] In forms like *njesu* (1st person sing.) instead of an unattested but probable *njosu* it is perhaps more understandable. Out of 9 forms in the present (including the dual) only the first singular and third plural (P *niosę, niosą*) would have had the conditions for *'e* > *'o*. We assume, therefore, leveling in favour of the majority situation.

wołać vs *dźeržeć* < **dъržati, třělеć* < **strěl'ati*
wołam, třělam but *wołaš* vs *třěleš*

19. Proto-Slavic *g* > *h/ø*

g > *h* > *ø* except before a vowel. This latter phase is not recognized orthographically.

**noga* > *noha, *golva* > *hłowa [u̯oṷa], *bogъ* > *Bóh [bó]* but *Boha [boha], *tęgnǫti* > *ćahnyć [c'anyc'], *gubiti* > *hubić* but prefixed *zhubić [zubic']* as opposed to *zahubić [zahubic']*.

20. Simplification of *str* > *tr*

**sestra* > *sotra, *ostrъjь* > *wótry, *strěxa* > *třěcha, *strěliti* > *třělić, *stradati* > *tradać*. This does not apply to *str* arising from metathesis or by loss of weak jer: **storna* > *strona, *storža* > *stróža, *persterti* > *přestrěć, *sъstrěliti* (> **sъtrělit'*) > *střělić* (cp. P *zestrzelić*), **sъstrigati* (> **sъtrigat'*) > *střihać* (cp. P *zestrzygać*). Some instances of *str* are either borrowings as *straž* (note Cz reflex of *tort*), dialect mixture (the nearby southeastern LL dialects retain *str*) or confusion with prefixed forms as *strach* (*strašić* being the perfective of *trašić*), thus the pairs *strašny - trašny, strašnik - trašnik, strachliwy -trašliwy, strašidło - trašidło.*[17]

21. Proto-Slavic *v*

v > *u̯* merging with *u̯* < *l* but the distinction is retained orthographically: *wołać [u̯oṷać], włós [u̯u̯ós* > *u̯ós], łós [u̯ós]*.

v' > *j* in final position, and intervocalically, especially before *i:*

**krъvь* (> **krev'*) > *krej, *cьrkъvь* (> **c'erkev'*) > *cyrkej, *loviti* > *łojić, *staviti* > *stajić, *rǫkavica* (> **rukajica*) > *rukajca*. In the adjectival suffix *-ovit-* (> *-ojit-*)> *-ojt-* as in *pěskojty, słabojty, słódkojty, dešćojty* (cp. Ukr *doščovytyj*). See also No. 23.

**synove* (nom. plural) > **synov'o* > *synojo*

22. Initial *x* > *kh* (aspirated *k*)

x in initial positions occurs only in foreign borrowings as *chemija*, etc. In all native Slavic forms *x-* > *kh-* and this fact was reflected orthographically up until 1949.

**xoditi* > *khodźić, *xlěbъ* > *khlěb, *xvaliti* > *khwalić, *xyliti sę* > *khilić so, *dъxorъ* > *tkhór*, now spelled *chodźić, chlěb, chwalić, chilić so, tchór.*

The same applies to prefixed forms of any root beginning with *x*, that is, *wuchodźić, nachilny, přechwalić [u̯ukhodźić, nakhilny, pšekhu̯al'ić].*

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[17] Since the adjectival formant *-liw-* < **ьliv-* (cp. OCS *pobědьlivъ*), the form *trašliwy* (with regular *x* > *š* / —— *ь*) seems to be an older formation than *strachliwy*.

23. Loss of unstressed vowels

This is more in the nature of a tendency and cannot be defined by a sound law, but it applies more to *i, y* or *u* than to other vowels.

**hołub > hołb, *košula > košla, *koryto > korto, *dosyć > dosć, *spožičić > spožčić, *pomahać > pomhać, *pjelucha > pjelcha, *hałuza > hałza, *polica > polca, *pšenica > pšeńca, *piwnica > pinca.*

Many of the syncopated forms are still current in their original form: *košula, koryto, pomahać, pjelucha, hałuza* (but only *hałžka, hałzaty, hałzojty*), also *pšenica* and *piwnica*. The phenomenon is more widely encountered colloquially, as *hasnyć [hasnć], torhnyć [tornć].*

24. Palatalization of consonants

(a) All PSl front vowels palatalize a preceding consonant.

**kostь > kósć, *dьnь > dźeń, *mědь > mědź, *tęžьko > ćežko, *tělo > ćełło, *nesti > njesć, *vedešь > wjedźeš*

This palatalization may be lost in new consonant clusters after the lost of weak jers, thus, **tьneši* (> **t'ьn'ešь*) > *tnješ* but **tьma > ćma, *ganьbiti > hańbić.*

(b) The PSl *č, š, ž* remain palatalized but *s, z, c* (< *tj,* 2nd and 3rd palatalization of *k*), and *z* (< *dj,* 2nd and 3rd palatalization of *g*) all dispalatalize.

**prędja* (> **přaz'a*) > *přaza, *kělъjь* (> **c'ěly*) > *cyły, *sila* > *syła, *vьsь* (> **w'es'*) > *wjes, *zima* > *zyma, *zemja* (> **z'em'a*) > *zemja*

(c) *t'* > *ć, d'* > *dź.* In the modern language *ć* merges with *č* so that *česać* and *ćesać* < **tesati* are homonyms.

(d) — *l'* (< *lj*) and *l* + front vowel > *l'* which later dispalatalized in all positions except before *i, ě, e* where it is lightly palatalized.

**l'udъ* (> **l'ud*) > *lud, *prьjatel'ь* (> **přećel'*) > *přećel, *pal'ǫ* (> **pal'u*) > *palu, *ledъ* (> **l'ód*) > *lód, *lęgnǫ* (> **l'ahnu*) > *lahnu* but *lěto, lipa, len [l'ěto, l'ipa, l'en].* As in P *l'* > *l* does not lead to a merger of the new hard *l* because *l* > *ł* (written *ł*).

— *n'* (< *nj*) and *n* + front vowel > *n'* which is retained:

**kon'ь > kóń, *dьnь > dźeń, *nesti > njesć, *živl'enьje > živjenje*

— *r'* (< *rj*) and *r* + front vowel > *r'* which is retained except in syllable final position:

**mor'e > morjo, *bergъ* (> **br'eh*) > *brjóh, *rędъ > rjad,*

**rebro* > *rjebło*, **lěkar'ъ* > *lěkar*, **tvarъ* (> **tvar'*) > *twar* (formerly spelled *lěkař*, *tvař*) but *lěkarja*, *twarje* (gen. sing.). The same applies to *r'* < **tьrp*, **tьrk*: **vьrba* (> **v'er'ba*) > *wjerba*, **vьrxъ* (> **v'er'x*) > *wjerch* (formerly spelled *wjeŕba*, *wjeŕch*).

kr', *pr'*, *tr'* > *kř*, *př*, *tř*: **kresati* > *křesać*, **kridlo* > *křidło*, **pręsti* > *přasć*, **pri* > *při*, **prъjati* (> **pr'āti*) > *přeć*, **tręsti* > *třasć*, **trъje*, **tri* > *třo*, *tři*, **bratrъja* > *bratřa*, **ostriti* > *wótřić*. This change does not occur when *r* follows *k*, *p*, *t* as the result of metathesis of the *tort*-formula or as the result of the loss of a weak jer.

**třeska* > *třeska* vs *trjebić* < **terbiti* (cp. Ukr *terebyty*)
**tretьjь* > *třeći* vs *trěć* < **terti* (cp. R *teret'*) or *trješ* < **tьreši*
**prъjati* > *přeć* vs *prěć* < **perti*, *prěčić* < **perčiti*, *prěčny* < **perčьnъjь* (cp. R *za* + *peret'*, Ukr *perečyty*, *po* + *perečnyj*)

Note *r* is soft in *trjebić*, etc. but not *r'* > *ř*. An interesting anomaly occurs in the root **perdъ* > *před* (as a preposition) but *prědk* (noun) < **perdъkъ*, *prědni* (adjective) < **perdьnъjь*, also *prjedy* or *prjódce* (adverb). Similarly the prefix *per*-(cp. E Sl *pere*-) always gives *pře*, possibly by analogy to *při*.

(e) Labials palatalize not only before front vowels but also where epenthetic *l* was lost. Palatalized labials are lost in final position.

**męso* > *mjaso*, **zemja* > **zeml'a* > *zemja*, **kupl'en-* > *kupjeny*, **pero* > *pjero*, **konopl'ъ* > *konop* but *konopje* (gen.), **osmь* > *wosm* but *wosmi* (gen.).

(f) Velars palatalize before *i* < *y*. (See No. 14.)

25. Prosodic features

PITCH: lost probably at a very early date.

STRESS: fixed on the initial syllable as in Cz.

QUANTITY: lost but not without trace. These are *ó*, *ě* < *ō*, *ē* with some few examples of *ō*, *ē* < *ъ*, *ь*. Note that every *ó* < *ō* (or *ъ̄*) but not every *ě* < *ē*. *ě* can also be the reflex of *ě*, thus, *pěc* < **pēc* < **pecь* but *wěra* < **věra* or *dźěd* < **dědъ*. In modern UL, *ó*, *ě* can occur only in initial syllable and *ó* cannot occur before a labial or a velar.[18] *ó* and *ě* have the following sources:

[18] In this environment *o* and *ó* narrow and rise (tentatively marked *ǫ*) bringing them phonetically so close that the distinction *o* vs *ó* is lost. Thus, the difference between *błóto* (old acute) vs *złoto* (old circumflex) disappears in *sroka* (old acute) vs *hłowa* (old circumflex) but returns in *sróći* (adjective) vs *hłowa*. Since the occurrence of *ǫ* is automatic, it is not marked orthographically. Labial here also refers to *w* < *ł* but velar excludes *h* < *g*.

1. Old acute (type-*a* stress):

**vőrna* > *wróna, *kőlda* > *kłóda, *bĕrza* > *brĕza, *bĕrmę* > *brĕmjo, *mőrzъ* > *mróz, *kőrva* > *kruwa* (*ó* > *u* is normal before *w*) but **sőrka* > *sroka* and **sőlma* > *słoma* (because of *k, m*), **mőrčiti* > *mróčić, *pőlšiti* > *płóšić, *kőlti* > *kłóć, *mělti* > *mlĕć, *tĕrti* > *trĕć*

Length from an old acute is a feature reminiscent of Cz (e.g. **vőrna* > *vrána*), but in Cz length is retained only in forms under two syllables, thus, *vranou* (< **vőrnojǫ*) or *vranami* whereas UL has *wrónu* (< **vőrnojǫ*) and *wrónami*, also *płóšić* or *mróčić* vs Cz *mračiti* and *plašiti* (three syllables).

2. Prestressed length (type-*b* stress):

**borzdà* > *brózda, *čerdà* > *črjóda, *žerdlò* > *žórło* (dial. *žrĕdło*), **serbrò* (> **srēbro*) > *slĕbro* but **melkò* > *mloko* (because of *k*) but **vъ melcě* > *w mlóce, *žerbè* > *žrĕbjo*. As elsewhere in W Sl prestressed length is not retained in forms with type-*c* stress: **bordà* > *broda* (cp. Cz *brada,* R *borodà, bòrodu*).

3. Compensatory lengthening:

The loss of weak jers lengthened *o* or *e* in a preceding syllable with a high degree of regularity.

**vozъ* > *wóz, *nosъ* > *nós, *nocь* > *nóc, *pecь* > *pĕc, *medъ* > *mĕd, *ložьko* > *łóżko, *kostь* > *kość, *kozьla* > *kózła* (gen. of *kozoł*).

Note the difference between *wóz, woza* (gen.) and *mróz* but *mróza* or *dłoń* but *dłónje* because *ó* in the latter two examples is of old acute origin. Here are included also nouns of type-*b* stress as **nožь* > *nóż, *konjь* > *kóń, *dvorь* > *dwór, *dъxorь* > *tchór* although some reference works may prefer to classify them as examples of neo-acute length. As argued above (pp. 202-5), the case for neo-acute length of *e, o* or strong *ъ, ь* is rather weak whereas UL compensatory length is established beyond doubt.

Occasionally this length in the nominative (a closed syllable) is generalized to the oblique cases, thus, *tchór, tchórja; jěž, jěža; wósk, wóska; chróst, chrósta; młót, młóta,* etc. posssibly by analogy to length in prestressed syllables.

4. Neo-acute:

(a)Verbs of type-*b* stress: all persons except first singular in the present:

**borniši* (> **bórnišь*) > *bróniš, *perčiši* (> **pérčišь*) > *prĕčiš, *možeši* (> **mózešь*) > *mózeš, *koltiši* (> **kóltišь*) > *kłóćiš* vs **zoltiši* (> **zoltíšь*) > *złoćiš* (cp. Ukr *kolotýty, kolótyš* vs *zolotýty, zolotíš*)

Often this length is generalized to other forms where it is not phonetically motivated, thus, *brónić, prĕčić, kłóćić* but *złoćić* (cp. Cz *brániti, příčiti, klátiti* but *zlatiti*).

(b) Verbs undergoing contraction of the stem:

**porskàješi* (> **pórskāšь*) > *próskaš*, also *próskać* (infinitive)
**verskàješi* (> **vérskāšь*) > *wrěskaš*, also *wrěskać* (infinitive)

(c) *ó* < *ō* before a *jotated* consonant:

**bolje* (> **bōl'e*) > *bóle*, **gorje* (> **gōr'e*) > *hórje*, **dorgje* > *dróže*, **storgja* > *stróža*, **portja* > *próca*

The last three examples can also be explained as old acute length of a *tort*-formula. Counterexamples are: **volja* > *wola*, **kozja* > *koža* (cp. Cz *vůle*, Slk *vôl'a* but Cz *kůže* vs Slk *koža*).

(d) Long form adjectives of type-*b* and -*c* (as a remnant):

**mokrъjь* > *mókry*, **ostrъjь* > *wótry*, **modrъjь* > *módry* (but **dobrъjь* > *dobry*, **golъjь* > *hoły*), **tьmьnъjь* > *ćěmny*

5. *ē, ō* < *ь, ъ*

Examples of this are too few to permit any definite conclusions, but length here seems more frequent with roots having had type-*b* stress:

**bъzь* > *bóz*, **sъnь* > *són*, **rъtь* > *rót*, **tъni* > *tón*, **mъxь* > *móch*, **šьvь* > *šów* (now *moch*, *šow* because *ó* > *o* before velar or labial), **mьčь* > *měč* (formerly attested) > *mječ*. With type-*c* stress *ь, ъ* > *e, o* as in **rъžь* > *rož*, **dъnь* > *dźeń*, **vъsь* > *wjes* (cp. the long falling of Sln *rȇž, dân, vâs*).[19]

It is significant that forms with length are also those in which the vowel of the nominative singular has been generalized throughout the paradigm. That is, *són* - *sona* and the like has replaced the older *són* (or **son*) - *sna* < **sъna* (with normal loss of weak *ъ*). Had *ó* in *són* always been long, then we would expect the vowel generalized in the oblique cases to be the same as in the nominative. That is, *són* - *sna* should have given rise to **són* - **sóna* but this latter occurs nowhere. Therefore, the development must have been **son* -*sna* > **son* - *sona*, and *o* > *ó* in *són* comes later by analogy to the model *nós* - *nosa*.

Final comments. As discussed elsewhere, neo-acute length is more consistently attested with etymologically long vowels but only sporadically with the short ones (*e, o, ь, ъ*). In type-*b* verbs such as *prositi* (as opposed to *sǫditi*) or in the pronominal form of adjectives with type-*b* or -*c* such as **dóbrъjь, *dóbraja, *dóbroje* vs **dobrь, *dobrà, *dobrò* (as opposed to **bělъjь* vs **bělь*, etc.), it is usual for length to be absent, thus, in Cz *prosíš* vs *soudíš* (*ou* < *ū*) and *dobrý* vs *bílý*. This, however, does not apply to *e, o* if they are part of the *tort*-formula, for *e, o* + *r* or

[19] Even in such a small sampling the distribution of type-*b* vs type-*c* forms does not always correspond to what we would expect on the basis of comparative evidence.

l are treated as a diphthong and behave like long vowels. Since UL exhibits traces of distinctive length only in *ē* and *ō* it is only natural that almost all examples cited above are *tort*-formula forms. These should be considered as regular; others, as requiring further explanation. For example, in *brózda* < **borzdà, kłóćiš* < **kóltiši* or *chrósta* < **xvorstà* (gen. of *chróst* < **xvorstъ*),[20] we are dealing with a straightforward examples of neo-acute length in *kłóćiš* or *chróst* and preservation of prestressed length in *brózda* and *slĕbro*. On the other hand, in *móžeš, ćĕmny, mókry, tchórja* < **dъxor'à* length is unexpected either as a remnant of a once more widely spread system or as an irregularity.

The presence of old-acute length in *wróna* < **vőrna* implies but does not prove the former existence of long vowels in other roots containing —˝. That is, it is logical to assume **žãba* > **žába, *lĩpa* > **lípa* or **sỹrъ* > **sýr*. Similarly, prestressed length in *brózda* < **borzdà* implies also **tráva* < **trāvà* etc., all of which would have produced a situation very similar to that in Cz. If this is so, then instances of irregular length are explicable in term of sporadic analogical extension of length to forms with a similar stress pattern. Thus, the many adjectives of type-*b* stress having a long vowel in the root could influence adjectives of the same stress type but with a short vowel in the root. That is, forms like **glúp* < **glupъ, *glūpà, *glūpò* and **glúpỹ* < **glúpъjь* where neo-acute and prestressed length are expected (see p. 201)could exert an influence on some of the forms like **mòkr* < **mokrъ, *mokrà, *mokrò* and *mòkrỹ* < **mòkrъjь* causing the root vowel to lengthen by analogy. Such readjustments would, of course, have to take place before the W Sl languages developed fixed stress. (See also pp. 202-3.)

Positing an early UL prosodic system analogous to Cz then, we must also assume its later loss. Before this happens, *ē* > *i̯e* (merging with *ĕ*) and *ō* > *u̯o*. That is, the former contrast in length for these two vowels was replaced by one in quality (see pp.148-51). All other vowels retained the older, purely long vs short contrast. Thus, loss of length in **tráva* or **hlúpý* allowed *á* and *a, ú* and *u* or *ý* and *y* etc. to merge completely whereas *i̯e* and *u̯o* remained because they were not long vowels. Later *i̯e* and *u̯o* (spelled *ě* and *ó*) were eliminated in all but initial syllables.

[20] We are assuming that this form was type-*b* stress in Proto-UL although comparative evidence indicates it may have had a different stress in other areas of Slavic e.g. Ukr *xvòrost* < **xvôrstъ*.

LOWER LUSATIAN

1. The second palatalization

   k > *c:* **kě₁lъjь* > *ceły*, **vъ rǫkě₁* > *v ruce*
   g > *z:* **kъ dorgě₂* > *k droze*, but *g* > *dz* after *z:* **vъ mězgě₁* > *w mězdze*
   x > *š:* **vъ porxě₂* > *w proše*, **pri muxě₂* > *pśi muše*
   kv > *kw:* **kvě₁tъ* > *kwět*
   gv > *gw:* **gvě₁zda* > *gwězda*
   sk (> *šč* > *št'*) > *šć:* **skě₁riti* > *šćěriś*

2. The third palatalization

   k > *c:* **ovьka* > *wojca*, **měsęk-* > *mjasec*
   g > *z:* **kъnęg-* > *kněz*, **retęg-* > *rjeśaz*
   x > *š:* **vьx-* > *wšen*, **olъxa* > *wolša*

3. *dl, tl* are retained

   **pletlъ* > *pletł*, **ŏrdlo* > *radło*
   **mydlo* > *mydło*, **vedlъ* > *wjadł*

4. The *ort-, olt*-formulae

   **ŏrt, *ôlt* > *rat, lat:* **ŏrdlo* > *radło*, **ŏrmę* > *ramje*, **ôlkom-* > *łakomnik*
   **ôrt, *ôlt* > *rot, lot:* **ôrvьnъjь* > *rowny*, **ôlkъtь* > *łokś*, **ôrsti* > *rosć*

5. The *tort*-formula

   **tort* > *trot:* **borda* > *broda*, **porsę* > *prose*, **morzъ* > *mroz*
   **tert* > *tr'et:* **berza* (> **br'eza*) > *brjaza*, **dervo* > *drjewo*, **bergъ* (> **br'eg*) > *brjog*
   **tolt* > *tlot:* **soldьkъjь* > *słodki*, **volčiti* > *włocyś*, **polnina* > *płonina*
   **telt* > *tl'et:* **melko* (> **ml'eko*) > *mloko*, **velkti* (> **vl'ec*) > *wlac*, **melti* (> **ml'eś*) > *mlaś*

   There are a certain number of *tert*-formula forms in which **tert* > *trět*, not *tret*. *ě* is the expected reflex for PSl *ě* or *ē*, that is, *e* in *tret* was lengthened for reasons not as yet explained, thus, **žerdlo* > *žrědło*, **sterti* > *strěś*, **merti* > *mrěś*, **žerb-* > *žrěbc*, **perdъnъjь* > *prědny*, **serdъnъjь* > *srědny*.

6. The reflexes of *ь̯*, *ъ̯*

   ь̯ > *'e:* **dьnь* > *źeń*, **čьstь* > *cesć*, **mьn'ьšьjь* > *mjeńšy*
   ъ̯ > *e:* **mъxъ* > *mech*, **rъžь* > *rež*, **vъzьmǫ* > *wezmu*, **krъvь* (> **kšev'*) > *kšej*, **krъtь* > *kšet* (*r* > *š* is normal here)

There are some few examples of *ę, ǫ* > *o* as **sъnъ* > *soń* (*ń* is unexpected), **osьlъ* > *wosoł*, **posъlъ* > *posoł*, **kozьlъ* > *kozoł* but **kotьlъ* > *kośeł*. Such instances are rarer by far than in UL and are probably by analogy and/or confusion with the *'e* > *'o* process as well as the later loss of palatalization by certain consonants. At a later date *'e* (< *ь*) may undergo the same process as *'e* of other origins, that is, *'e* > *'a*, thus, **pьsъ* (> **p'es*) > *pjas*, **vьsь* (> **v'es'*) > *wjas*, **lьnъ* (> **l'en*) > *lan*.

ьj > *ij:* **pьjǫ* > *piju*, **šьja* (> **šija*) > *šyja*

ъj > *yj:* **bosъjь* > *bosy* (Regarding *i, y* here, see p. 255.)

jь- > *ø* in weak position: **jьmę* > *mě*, **jьgrati* > *graś*, **jьskra* > *škrja*

jь > *je* in strong position: **jьgъla* > *jegła* and *gła*

Strong *ь, ъ* + *k, c, t, s* are lost in final syllables:

**konьcь* > *końc*, **konьčьkъ* > *końck*, **pъtašьkъ* > *ptašk*, **lokъtь* > *łokś*, **nogъtь* > *nokś*, **ovьsъ* > *wows* but **osъtъ* > *woset*, **xrъbьtъ* (> **xśeb'et*) > *kśebjat*[21] and also *woseta, kśebjata* (gen.), **němьcь* > *Němc*, **domъkъ* > *domk*

7. *tj, ktĭ, gtĭ* > *c*

**světja* > *swěca*, **pekti* (> **p'ec*) > *pjac*, **mogti* > *moc*

8. *dj* > *z*

**medja* (> **m'eza*) > *mjaza*, **tjudj-* > *cuzy*, **ědja* > *jěza*

9. *stj, skj, sk* + FV (> *šč* > *št'*) > *šć*

**skъrba* > *šćerba*, **puskěti* > *pušćaś*, **ogniskjo* > *wognišćo*, **městjan* > *měšćan*

10. *zdj, zgj, zg* + FV (> *ždž* > *žd'*) > *ždź*

**drozgьje* > *droždźeje*, **dъzdjь* (> **deždź*) > *dešć*

11. Epenthetic *l* is lost at morpheme boundaries

**rǫbjǫ* (> **rubl'u*?) > *rubju [rub'u]*, **zemja* (> **zeml'a*?) > *zemja [zem'a]*. Note that the labial preceding the epenthetic *l'* retains its palatalization.

12. The *tъrt*-formulae

**tъrt* > *tart/tert:* **tъrgati* > *tergaś* (*targaś* also attested), **mъrxъve* > *marchwje* (gen.), **xъrtъ* > *chart*. After *k, g* there is palatalization: **kъrčьma* > *kjarcma*, **kъrmiti* >

[21] This root occurs in two forms: **xrьbьtъ* and **grьbьtъ*, cp. Ukr *xrebet* vs Cz *hřbet*, P *grzbiet* vs Kashubian *chrzept*. In LL *x* > *k* / —— *ś* is also attested in *kśěn* < **xrěnъ* (cp. Ukr *xrin*), *kśěś* < **xъtěti*.

*kjarmiś, *gъrdlo > gjardło, *gъrstь > gjarść* (see No. 18 c)

**tъrt > tart* before hard dentals: **čъrnъjь > carny, *tvъrdъjь > twardy, *mъrznǫti > marznuś, *sъrna > sarna,* but **zъrno > zerno*

**tъrt > t'ert* elsewhere: **žъrdь > žerź, *čъrvь > cerw, *vъrba > wjerba, *pъrvъjь > pjerwy, *sъrpъ > serp.* It seems that *r* originally was palatalized before labials and velars, that is, **vъrba* (> **v'erba*) > *wjerba*

**tъlt > tłut:* **tъlstъjь > tłusty, *tъlkti > tłuc, *stъlpъ* (> **stłup*) > *słup, *dъlgъ > długi, *sъlnъce* (> **slunce*) > *słyńco*[22]

**tъlt > tłut* when a dental precedes *ь: *dъlgьjь > długi*

**tъlt > tołt* when *c < č, ž* precedes *ь: *žъltъjь > żołty, *čъlnъ > cołn*

**tъlt > tołt/tałt* when a labial precedes *ь* and a hard dental follows *l: *vъlna > wałma, *pъlnъjь > połny* but *pałny* also attested

**tъlt > t'elt* elsewhere: **vъlkъ > wjelk, *mъlčati > mjelcaś, *pъlniti > pjelniś* (older) and *połniś* (modern standard) by analogy to *połny*

13. The *trъt*-formula

As in UL, P or Ukr, in strong position the jers of *trъt* develop as do strong jers in any other environment. In weak position jer is lost giving rise to new clusters which may subsequently be altered by simplification or by insertion of a vowel.

**blъxa* (> **blxa*) > *pcha, *krъvavъjь* (> **kšvavy*) > *kšawy, *jablъko > jabłuko, *slъza > łdza, *trъstina > ścina, *s ± trъmenь > tśmjeń,*[23] **drъžati > držaś, ržaś* or *rdžaś* (dial.). Cp. also UL *ržeć* or *žrjeć*

14. *i* and *y*

i and *y* are phonologically considered to be variant of one phoneme, but as in R they remain phonetically distinct, *y* being similar to Eng *i* in *it*.

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[22] All the forms cited begin with a dental. There are insufficient examples with labials and velars to set definite rules; however, the examples extant do not show metathesis; *kjałbas, pałkaś* and *połkaś < *kъlbas-, *pъlkati.*

[23] Slavic demonstrates two ablaut grades and two forms for this root: **stremę* > P *strzemię*, R *strem'a* and **(s)trъmenь* > Cz *třmen* but Slk *strmeň*. In LL *ś < r* could arise only from *r* + *ь* but *s* in *str* drops only if there was *str* + back vowel. LL *tśmjeń* is either from **trъmenь* or influenced by UL *třmjeń* where every **str > tr, tř.*

i > *y* after *s, z, c, š, ž:* **sirota* > *syrota, *zima* > *zyma, *noči* > *nocy, *varęci* > *warjecy, *čistъjь* > *cysty, *šiti* > *šyś, *žiti* > *žyś, *voziti* > *wozyś, *prositi* > *pšosyś, *žičiti* > *žycyś, *starъšьjь* (> **starši*) > *staršy*

y > *i* after *k, g:* **rǫky* > *ruki, *nogy* > *nogi, *tьnъkъjь* (> **t'en'kȳ*) > *śańki, *kydati* > *kidaś, *gybati* > *gibaś* but *x* + *y* is retained: **xyliti* > *chyliś, *muxy* > *muchy*

vy > *wu* in initial position: **vynesti* > *wunjasć, *vypiti* > *wupiś, *vysokъjь* > *wusoki, *vydra* > *wudra.* Before 1952 *wu-* was spelled *hu-*.

15. The nasals

ǫ > *u:* **dǫbъ* > *dub, *rǫka* > *ruka, *mǫdrъjь* > *mudry*

ę > *'ě* when stressed, that is, initial syllable except after *s, z, c, š, ž* where *ę* > *e:* **ględati* > *glědaś, *jędro* > *jědro, *svętъjь* > *swěty,* but **sęgnǫti* > *segnuś, *rędъ* > *rěd* but **zęba* > *zeba, *pęta* > *pěta,* but **często* > *cesto, *tęgnǫti* > **śěgnuś, *klęti* > *klěś* but **žęti* > *žeś*

ę > *'e* elsewhere: **zvěrę* > *zwěrje, *devętь* > *źewjeś, *telęta* > *śeleta*

16. The reflexes of *ě*

ě > *'ě* in initial syllable except after *c, s, z* where *ě* > *e:* **měra* > *měra, *věriti* > *wěriś, *dědъ* > *źěd, *lěsъ* > *lěs, *rěka* > *rěka* but **sěno* > *seno, *cělъjь* > *cały, *zěvati* > *zewaś*

ě > *'e* elsewhere: **koléno* > *koleno, *neděl'a* > *njeźela, *na nozě* (< **na nogě₂*) > *na noze*

17. The *'e* > *'o* alternation

'e > *'o* can occur in final position and before any hard consonant but not consistently:

**teta* > *śota, *jezero* > *jazor, *večerъ* > *wjacor, *žena* > *žona, *sestra* > *sotša, *ledъ* > *lod, *medъ* > *mjod, *želǫdь* (> **žołud'*) > *žołź, *čelo* > *coło, *versъ* (> **vr'es*) > *wrjos, *verdъ* (> **vr'ed*) > *wrjod, *rebro* > *rjobło, *daleko* > *daloko, *ščetъka* > *śćotka, *ščedro* > *śćodro, *melko* (> **ml'eko*) > *mloko, *stegno* > *ścogno, *pol'e* > *polo, *palite* > *paliśo* (thus in all 2nd person plural: *pišośo, bjerjośo*), **mor'e* > *morjo, *sъbožьje* > *zbožo*

Counterexamples: **popelъ* > *popjeł, *pero* > *pjero, *mytьje* > *myśe, *vedro* > *wjedro, *pletǫ* > *pletu*

In the majority of instances, however, unchanged *e* later undergoes another change — *'e* > *a* (see below). Thus, **nesǫ* conforms to the conditions

for *'e > 'o* (cp. P *niosę*) but *'e > 'o* either never occurred here or *e* was reestablished. In such a case *'e > 'a* (**n'esu > njasu*).

The number of counterexamples is so great and varied that it has proven impossible to define the environment(s) where *'e > 'o* occurs and where it does not (or rather was reversed). There is great variation in the dialects (with many parallel forms such as *mjod, mjed,* etc.) and many differences between the present situation and that attested in earlier documents. Whatever the original conditions may have been, these gave rise to the type of alternation as still seen in P (*niosę* vs *niesie; żona* vs *żenić się*). In LL as in UL the tendency has been to eliminate the *e* and *o* alternation especially in inflections. As a result, either *e* or *o* is generalized in all forms of one root — not *br'og* vs **br'ez'ě* nor *br'oza* vs **br'ezě* but *brjog, brjoze* and *brjeza, brjeze* (later *brjaza, brjaze*).

18. The *'e > 'a* shift

'e > 'a if the following consonant is hard. This includes *e* from the following sources:

(a) *e* followed by a hard consonant but did not undergo the *'e > 'o* for whatever reasons: **br'eza > brjaza, *n'esu > njasu, *p'eku > pjaku, *kol'eso > kolaso, *kresati > *kśesać > kśasać, *v'eslo > wjasło.*

(b) *e* followed by *s, z, š, ž, c* (< *č, c*) which were palatalized at the time of *'e > 'o* but subsequently hardened. Thus, in **m'ez'a* (< **medja*) no *'e > 'o* is expected because of *z'*; later **m'ez'a > *m'eza* giving the conditions for **m'eza > mjaza; *veselъjь* (> **v'es'oly* > **v'esoly*) > *wjasoły; *večerъ* (> **v'eč'or* > **v'ecor*) > *wjacor; *l'ežati > lažać; *jezer(o)* (> **jez'or*) > *jazor; *desętь* (> **źes'ěś*) > *źaseś* but *źewjeś* < **devętь* because *w* is still palatalized.

(c) *e* < *ь* provided a hard consonant follows — both originally hard or as a result of dispalatalization in the case of *s, z, c, š, ž: *lьnъ* (> **l'en*) > *lan* but **dьnь > źeń* because of *ń, *pьsъ* (> **p'es*) > *pjas, *vьsь* (> **v'es'*) > *wjas, *dьržati* (> **d'eržati*) > *žaržać, *lьvъ* (> **l'ev*) > *law, *stьžьka > *st'ežka > ścažka.* This is very likely the origin of *'a* < *ъ* in *tъrt, tъlt,* that is, **kъrčьma > *kerčma > k'ercma* thus giving the conditions for *'e > 'a* (*kjarcma* or *kjałbas* < **k'ełbas*).

The *'e > 'a* shift does not affect:

(1) *e* < *tъrt* if a labial or velar followed *r: *vъrba > wjerba* because *r* was still palatalized at that time, **vъrxъ > wjerch* (cp. P *wierzch* where *rz* < *r'*)

(2) *e* < *ě, ę: kolena, człowjek (e* < *ě); jastśeb, zajety (e* < *ę)* although some rare examples do exist: **ječьmenь > jacmjeń* (but *jězyk*

< **językъ*), **měsęcь* > *mjasec* (but *měra* < **měra*), *rješaz* < **retęzъ*[24]

19. *r* > *š* after *k, p, t*

kr, pr, tr > *kš, pš, tš* when followed by a back vowel:

**kryti* > *kšyś*, **prositi* > *pšosyś*, **trava* > *tšawa*, **krъtъ* > *kšet*, **pravo* > *pšawo*, **trǫba* > *tšuba*

Note that "back vowel" here must be understood in its PSl sense; therefore *ъ* acts as do other back vowels in spite of the fact that *ъ* > *e* in LL.

The *r* > *š* does not occur if *r* comes to follow *k, p, t* as a result of metathesis or by loss of a weak jer.

**krajati* > *kšajaś* vs *krotki* < **kortъkъjь*
**prostъjь* > *pšosty* vs *proch* < **porxъ* or *praś* < **pъrati*
**troxa* > *tšocha* vs *strona* < **storna*

20. Simplification of *str* > *tš* before back vowels

**sestra* > *sotša*, **stradati* > *tšadaś*, **ostrъjь* > *wotšy*
**straxъ* > *tšach*, **strugati* > *tšugaś*

If a front vowel follows *str*, there is no simplification: **strěliti* > *stśěliś*, **strěxa* > *stśěcha*, **strigati* > *stśigaś*, **jastrębь* > *jastśeb* (cp. UL *třělić*, *třěcha*, *třihać*, *jatřob*). Regarding *r* > *ś*, see p. 272.

Simplification does not occur if *str* arise from metathesis or by loss of weak jer, thus,

strona < **storna*, *stšuchliś* < **sъtruxliti*

21. Proto-Slavic *v*

v > *u̯* merging with *u̯* < *l* but the distinction remains orthographically: *wołaś [u̯ou̯aś]* < **volati*

v' > *j* in final position or before *c*: **krъvь* > *kšej*, **ovьca* > *wojca*, **šьvьcь* > *šejc* (by analogy to the oblique cases **šьvьc* + V > **šev'c* + ending). The sequence *vi* often > *j*: **rǫkavica* > *rukajca*, **loviti* > *łojś*, but **staviti* > *stajiś*

There is a general tendency for all *w'* > *ø* not always reflected orthographically: *wjaža [jaža]*, but *cora* < **w'cora* < **vьčera*.

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[24] The absence of *'e* > *'a* in *kolena* or *jastśeb* indicates that *e* < *ě*, *ę* had not merged with *e* < *e*, *ь* at the time of *'e* > *'a*, that is, **koléna*, **jastśěb*. The distinction *e* (< *e*, *ь*) vs *ě* (< *ě*, *ę*) has been gradually eliminated until it exists now only in initial syllables — *na śěle* vs *śele* < **na tělě* vs **telę*. Like most linguistic processes, this merger would proceed at varying paces from region to region so that the contrast *ě* vs *e* is being lost in initial syllable as well (northeastern area). Examples like *rješaz* < **r'eśěz* < **retędzъ*, etc. simply represent certain forms where the contrast *ě* vs *e* had been lost at the time of *'e* > *'a*.

22. *o* > *ó* (high-mid vowel, strongly labialized)

This narrowing of *o* occurs whenever a velar or labial precedes a stressed *o* (that is, in initial syllable), except when a velar or labial follows the *o*. This feature was marked orthographically until the reform of 1952.

bosy [bósy] but *bok [bɔk]* because of *k*, however, *na pšawem boce [bóce]* because *k* > *c*; *božy [bóžy]* but *Bog [bɔk]*; *skocyś [skócyś]* but *skok [skɔk]*; *gora [góra]* but *pod goru [pódgɔru]* because *o* of *gora* loses its stress.

This would be a minor allophonic process if it were not for the fact that *o* > *ó* does not occur after the new labial *ų* < *l*. Thus, in forms like *łono [ųɔnɔ]* vs *wono [ųónɔ]*, *łojś [ųɔjś]* vs *wojś [ųójs]* or *łoski [ųɔsk'i]* vs *woski [ųósk'i]* the contrast *ɔ* vs *ó* is distinctive. Modern grammarians of LL on this basis now analyze *ó* as having phonemic status.[25]

23. *č* > *c*

**časъ* > *cas*, **červo* (> **čr'evo*) > *crjowo*, **čuti* > *cuś*, **čъstь* > *cesć*, **česati* > *cesaś*

č has reentered and/or has been retained in the following:

(1) borrowings: *čaj, češki*
(2) in the comparative of adjectives the stem of which ends in *ž, s: lažčejšy, wusčejšy*
(3) in the diminutive adjectival suffix *-učki: bosučki, małučki*

24. Palatalization of consonants

(a) All PSl front vowels could palatalize a preceding consonant:

**kostь* > *kosć*, **dьnь* > *źeń*, **mědь* > *měź*, **tężьko* > *śěžko*, **tělo* > *śěło*, **nesti* > *njasć*, **vedešь* > *wjeźeš*.

Palatalization may be lost after the loss of weak jers brings about new consonant clusters.

(b) Proto-Slavic *š, ž, c* (< *č, c*) and *z* (< *dj*, 2nd and 3rd palatalization of *g*) all dispalatalize. *s* and *z* of all other sources also dispalatalized:

**šiti* > *šyś*, **cělъjь* > *ceły*, **časъ* > *cas*, **žiti* > *žyś*, **medja* (> **m'ez'a*) > *mjaza*, **vъsь* (> **v'es'*) > *wjas*, **zima* (> **z'ima*) > *zyma*, **silьnъjь* (> **s'il'ny*) > *sylny*

(c) *t'* (> *ć*) > *ś*, *d'* (> *dź*) > *ź*. The affricate phase (*ć, dź*) is retained if a fricative precedes:

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[25] The so-called "functional load" of */ó/* is, of course, very low, but the possibility of */o/* and */ó/* contrasting is somewhat increased by the tendency to drop *ų* < *l* after other labials and obligatorily so after *ų* < *v*. Thus, *[ųɔs]* < *włos* (< **ųlos* < **volsъ*) contrasts with *[ųós]* < *woz; [pɔt]* < *płot* with *[pód]* < *pod*, etc.

**tьma* (> **t'ma*) > *śma* but **kostь* > *kosć* because *s* precedes; **dělati* > *źěłaś* but **sъdělati* > *zdźěłaś*, **mědь* > *měź* but **gvozdь* > *gozdź*

(d)(1) *l'* (< *lj*) and *l* + front vowel > *l'* which later dispalatalizes in all positions except before *i, ě, e.*

**l'udъ* > *lud*, **prьjatel'ь* > *pśijaśel*, **ledъ* (> **l'od*) > *lod* but *lipa, lěto, leśeś [l'ipa, l'ěto, l'eśeś]*. As in UL and P *l'* > *l* but this does not bring about a merger with *l* because *l* > *u̯* (written *ł*)

(2) *n'* (> *nj*) and *n* + front vowel > *n'* which is retained:

**kon'ь* > *koń*, **dьnь* > *źeń*, **pytanьje* > *pytanje*, **nesti* > *njasć*

(3) *r'* < *rj* and *r* + front vowel > *r'* which is retained even in final position in the nominative singular of masculine nouns and imperatives where unstressed *i* was dropped:

**mor'e* > *morjo*, **bergъ* (> **br'eg*) > *brjog*, **rebro* > *rjobro*, **lěkar'ь* > *lěkaŕ*, **pyrь* > *pyŕ* (cp. UL *lěkar, pyr*), **beri* > *bjeŕ* (also *bjeŕśo*), **měri* > *měŕ* but **gor'ьkъjь* > *gorki* (cp. R *gor'kij*)

kr', pr', tr' > *kś, pś, tś*

**kridlo* > *kśidło*, **kremenь* > *kśemjeń*, **pri* > *pśi*, **pręsti* > *pśěsć*, **tretьjь* > *tśeśi*, **tręsti* > *tśěsć*

Note the difference between *wotšy* < **ostrъjь* and *wostśiś* < **ostriti* (cp. UL *wótry* vs *wótřić*). In LL *str* > *tr* only before back vowels but is retained when *str* is followed by a front vowel. Only *tr* + back vowel > *tš* (vs unchanged *tr* in UL), but *tr* + front vowel > *tś* whereas UL has *tř*.

kr', pr', tr' > *kś, pś, tś* normally does not occur if *r* follows *k, p, t* as the result of metathesis or loss of a weak jer.

**treška* > *tśěska* vs *trěś* < **terti*
**pręsti* > *pśěsć* vs *prěcny* < **perčьnъjь* (cp. Ukr *poperečnyj*)

The preposition and prefix *pśed-* < **perd-* shows *pr'* > *pś* but other forms of the same root do not have it: **perdъkъ* > *prědk* (noun) or **perdьnъjь* > *prědny* (adj.). The verbal prefix *pśe* (as in *pśedaś* < **perdati*) and preposition *pśez* < **perzъ* also exhibits *pr'* > *pś* possibly by analogy to *pśi* < **pri* where *pr'* > *pś* is expected.

(e) Labials palatalize before front vowels and where epenthetic *l* was lost or failed to develop. Labials dispalatalize in final position:

**męso* > *měso*, **pero* > *pjero*, **zeml'a* > *zemja*, **golǫbь* > *gołub* but *gołubja* (gen.)

(f) *k, g* palatalize before *i, e* but this is not marked orthographically:

drogi [drog'i] — *i* < **ъjь, nogi [nog'i]* — *i* < *y*
droge [drog'e] — *e* < **oje, kjałbas* < **k'ełbas* < **kъlbas(a)*

(g) An interesting by-product of palatalization is the so-called epenthetic *j*. The vowel preceding a soft consonant tends to diphthongize by developing a palatal off-glide. This is phonetically a very natural process and occurs so widely that it is partially incorporated into the written language.

**xoditi* > *chojźiś, *saditi* > *sajźiś, *svatьba* > *swajźba, *sěděti* > *sejźeś* but *[zejm'a]* or *[zejma]* is still spelled *zemja, [kojń]* spelled *koń.*

25. Prosodic features

PITCH: lost probably at a very early date.

STRESS: fixed on the initial system.

QUANTITY: distinctive length lost. Recent dialectal and historical investigations reveal what seems to be remnants of compensatory lengthening, but there are no such traces in the literary language. Only in the reflexes of *tert* do we see what was likely a contrast of *ĕ* vs *ē*, that is, *tert* > *tret* (*e* < *ĕ*) and *trět* (*ĕ* < *ē*).

The lengthened reflex occurs in the formerly prestressed position as in **žerdlò* > *žrědło.* This is not unusual since both P and UL also retain prestressed length. However, *ě* occurs in situations where length is not expected such as *trěś* < **terti* (most probable old acute in view of R *terèt'*), *prědny, srědny* (old acute? — in view of Ukr *perèdnij, serèdnij*; cp. Cz *přední, střední* with shortened old acute in forms over two syllables: **pěrdьnъjь, *sěrdьnъjь*). The majority, however, of the lengthened forms are infinitives of the type already mentioned as *drěś, mrěś, prěś, strěś, žrěś.* It is precisely because the examples are so few in number and restricted almost entirely to one morphological category that makes it difficult to determine what exactly may have been the origin (or origins?) of this length.

A Comparison of Upper and Lower Lusatian

	Proto-Slavic	*Upper Lusatian*	*Lower Lusatian*
1.	k + 2nd and 3rd palat.	c	c
	g	z	z *and* dz *in* zdz < zg'
	x	š	š
	kv	kv	kv
	gv	hv	gv
	sk > šč > št	šć	šć
2.	dl	dl	dl
	tl	tl	tl
3.	ŏrt	rat	rat
	ôrt	rot	rot
	ŏlt	lat	lat
	ôlt	lot	lot
4.	tŏrt	trót	trot
	tôrt	trot	
	tŏlt	tlót	tlot
	tôlt	tlot	
	tĕrt	tr'ět	tr'et, tr'ět *(rare)*
	têrt	tr'et	
	tĕlt	tl'ět	tl'et
	têlt	tl'et	
5.	ь̥	'e + C'	'e, 'a
		'o *elsewhere*	
	ъ̥	e + C'	e
		o *elsewhere*	
	ь̥, ъ̥ + k, c, t, s	ø	ø
6.	ъj, yj	yj, y	yj, y
	ьj, ij	ij, i	ij, i
	jь-	ø, je-	ø, je-
7.	tj, ktĭ, gtĭ	c	c
8.	dj	z	z
9.	stj, skj, sk + FV	šč > št' > šć	šć
10.	zdj, zgj, zg + FV	žđž > žđ' > žđź	žđź
11.	*epenthetic* l	*lost at morpheme boundaries*	
12.	tъrt	tort	g, kjart
			tart/tert
	tьrt	tord	tard
		t'erd'	t'erd'
		t'er'p, k > t'erp, k	t'er'p, k > t'erp, k
	tъlt	tołt	dłut; kjałt, po/ałt
	tьlt	dołt	dłut
		tołd	
		č, žołd	č > c, žołt
		t'eld', k, p	po/ałd, t'elt

	Proto-Slavic	*Upper Lusatian*	*Lower Lusatian*
13.	trьt trьt	trt	trt
	tlьt	tłt	tłt
	tlьt	tl't	tl't
14.	i	i > y *after* s, z, c 'i *elsewhere*	i > y *after* s, z, c, š, ž 'i *elsewhere*
	y	y > i *after* k, h (< g), x y *elsewhere*	y > i *after* k, g y *elsewhere*
	vy-	wu-	wu- (hu- *in older texts*)
15.	ǫ	u	u
	-nǫti *(in verbs)*	-nyć	-nuś
	ę	'a	'ě *when stressed*
		'e' *(between C')*	*e when stressed after* s, z, c, š, ž
		-'o	'e *elsewhere*
16.	ě	y *stressed after* c, s, z	e *stressed after* c, s, z
		'ě *stressed elsewhere*	'ě *stressed elsewhere*
		'e *unstressed*	'e *unstressed*
17.	'e > o	'eC° > 'o	'eC° > 'o
		-'e > -o *(finally)*	-'e > -o
		Attested inconsistently with	
		less examples here	*more examples here*
18.		'aC' > 'e *including*	'eC° > a *including*
	'a > e	*etymological* 'a	'e *missed by* 'e > 'o
	'e > a	*and new* 'a < ę	'e + *dispalatalized cons.*
			'e < ь + *dispalatalized cons.*
19.	kr, pr, tr + back vowel	kr, pr, tr	kš, pš, tš
	kr, pr, tr + front vowel	kř, př, tř	ḱś, pś, tś
20.	g	g> h > ø *except between vowels*	g
21.	v	u̯ *(written* w*)*	u̯ *(written* w*)*
	-v' *(finally)*	-j	-j
	-v'- *(between vowels)*	-j- *(but not consistently)*	-j-
	vьc-	u̯c-	jc-
22.	č	č *(merges with* ć < t'*)*	c
23.	*initial* x	kh-	x-
24.	str + front vowel	tř	stś
	str + back vowel	tr	tš
25.		*tendency to drop unstressed vowels, especially* i, y, u	*no such tendency*

	Proto-Slavic	*Upper Lusatian*	*Lower Lusatian*
26.	l	ụ *(written ł)*	ụ *(written ł)*
27.	Overall palatalization by front vowels		
	lj > l' l + FV > l'	l' > l *except before* ě, e, i	l' > l *except before* ě, e, i
	nj > n' n + FV > n'	*retained*	*retained*
	rj > r r + FV* > r'	*retained only before vowels*	*retained before vowels and in final position*
	c, s, z	*dispalatalize*	
	č, š, ž	*remain palatalized*	*dispalatalize*
	t'	ć *(merging with* č*)*	ś *or* ć *(after fricatives)*
	d'	dź	ź *or* dź *(after fricatives)*
	p** + FV p' (< pl')	p *retained only before vowels*	
28.	o, e	o, e > ó, ě *as the result of:* *1. old acute length in* tort*-forms* *2. neo-acute length in* tort*-forms* *3. prestressed length in* tort*-forms* *4. compensatory lengthening after loss of* ъ, ь	*No trace of such lengthening*
		o, ó + labial, velar > ȯ	labial, velar + o > ó *insofar as neither a labial nor velar follow the* o

* Except where *k, p, t* precede the *r*

** p = any labial

UKRAINIAN

1. The second palatalization

k	> *c'*:	**kě₂na* > *cina*, **kě₂lъjь* > *cilyj*, **vъ rǫkě₂* > *v ruci*
g	> *z'*:	**na nogě₂* > *na nozi*, **na dorgě₂* > *na dorozi*
x	> *s'*:	**vъ uxě* > *u vusi*, **muxě₂* > *musi*
kv	> *c'v*:	**kvě₂tъ* > *cvit* and *kvit*[26]
gv	> *z'v*:	**gvězda* > *zvizda*
sk	> *sc'*	at morpheme boundaries: **dъskě₂* > *došci*
	> *sk*	within a root: **skě₂riti sę* > *škirytys'a*

2. The third palatalization

k	> *c'*:	**otъk-* > *otec'*, **ovьka* > *vivc'a*
g	> *z'*:	**kъnęg-* > *kn'az'*
x	> *s'*:	**vъx'-* > *vs' (ves', vs'a, vse)*

3. *dl, tl* > *l*

**pletla* > *plela*, **jědla* > *jila*, **mydlo* > *mylo*, **modliti sę* > *molytys'a*

4. The *ort-, olt*-formulae

**ŏrt* > *rat*:		**ŏrdlo* > *ralo*, **ŏrmę* > *ramja*
**ôrt* > *rot*:		**ôrsti* > *rosty*, **ôrbota* > *robota*
**ŏlt* > *lat*:		**ŏlkomъjь* > *lakomyj*
**ôlt* > *lot*:		**ôlkъtь* (> **lokъtь*) > *likot'*

5. The *tort*-formula

**tort* > *torot*:	**borda* > *boroda*, **morzъ* > *moroz*
**tert* > *teret*:	**bergъ* > *bereh*, **berza* > *bereza*
**tolt* > *tolot*:	**bolto* > *boloto*, **golva* > *holova*
**telt* > *tolot*:	**melko* > *moloko*, **velkti* > *volokty* (dial. *voločy*)

6. The reflexes of *ъ̯, ь̯*

ъ̯ > *e*: **dъnь* > *den'*, **pьn'ь* > *pen'*, **lъgъkъjь* > *lehkyj*

e < *ь* may undergo the same rounding process as etymological *e*; see No. 17.

ъ̯	> *o*:	**mъxъ* > *mox*, **vъšь* > *voš*, **rъtъ* > *rot*
jъ-	> *ø*:	**jъgrati* > *hraty*
	> *i*:	**jъskra* > *iskra*
ъ̯j	> *yj*:	**dobrъjь* > *dobryj*
ь̯j	> *yj*:	**pьjь* > *pyj*, **šьja* > *šyja*

[26] The *kv* here and elsewhere is not necessarily the result of P influence. *kv* is also attested in R dialect far beyond the area where P could have been a factor.

The masculine singular of the so-called soft adjectives such as **tretьjь > tretij, *sinьjь > synij* are later analogically conditioned forms. The expected *tretyj, synyj*, etc. are widely attested especially in western dialects. The expected *-yj* in the genitive plural of feminine consonantal declension is also widely attested in the western dialects, that is, **kostьjь, *věstьjь, *nočьjь > kostyj, vistyj, nočyj*. The literary *kostej, vistej, nočej* etc. seems to have a morphological origin.

In weak position *ь, ъ* of *ьj* or *ъj* are regularly lost; *j* will then bring about gemination of *d, t, s, z, l, n, č, š, ž* if a vowel preceded:

**žitьje > žytt'a, *znanьje > znann'a, *veselьje > vesill'a,*[27] **sǫdьja > sudd'a, *mědьjǫ > midd'u, *nočьjǫ > ničč'u* but **kostьjǫ > kist'u* (because of *s* preceding the *t*); **krъvьjǫ > krovju* (because labials are not subject to gemination)

There are some few instances of secondary epenthetic *l* arising in this environment but it is not a regularly attested phenomenon.

**zimovьje > zymivl'a* (cp. R *zimov'e*), **tъrgovьje > torhivl'a* but **vьrxovьje > verxivja, *nedokrъvьje > nedokr(o)(i)vja, *sъdorvьje > zdorovja* (literary) and *zdorovl'a* (dialectal).

7. Reflex of *ě*

ě > 'i in all environments:

**lěto > lito, *jěsty > jisty, *věra > vira, *zeml'ě > zemli*

8. The nasals

ę > 'a: **sęgati > s'ahaty, *žędlo > žalo, *porędъkъ > por'adok, *męso* (*> *m'aso*) *> mjaso*

ǫ > u: **rǫka > ruka, *mǫdrъjь > mudryj, *nesǫ > nesu*

9. *tj, ktĭ, gtĭ > č*

**noktь > nič, *platjenъjь > plačenyj, *vьrtjǫ > verču, *světja > sviča*

Infinitives of the type **mogti, *pekti, *strigti > mohty, pekty, stryhty* in the modern literary language are of more recent origin. The expected *močy, pečy, stryčy* are still widely used in the western dialects.

10. The reflexes of *dj*

**dj > dž* where *d* still exists in other forms of the same root.
> ž in other environments.

**xodjǫ > xodžu* because of *xodyty, xodyš, xodyt'*, etc., but **medja*

[27] The origin of the *-je > -'a* in these neuters is not fully understood — possibly by confusion with the collective suffix *-ьja*, such as in **kolsьja* (*> *kolosьja*) *> koloss'a*.

> *meža* since no allomorph of *mež-* retains *d; *sadjenъjь > sadženyj, *tjudjьjь > čužyj*

11. *stj, skj, sk* + FV > *šč*

**městjaninъ > miščanyn, *ogniskjo > vohnyšče, *piskěti > pyščaty*

12. *zdj, zgj, zg* + FV > *ždž*

**ězdjǫ > jiždžu,* drozgьje > drižđži*

13. Epenthetic *l* is retained

**zemja > zeml'a, *kupjǫ > kupl'u, *l'ubjenъjь > l'ublenyj*

There has been an extension of the use of epenthetic *l* into the third person plural of all verbs in which it occurs in the first person singular and/or the past participle passive, thus, *l'ubl'at' < *l'ubętь, stavl'at' < *stavętь, spl'at' < *sъpętь.*

14. The *tъrt*-formula

**tъrt > tort:*	**tъrgъ > torh, *gъrdlo > horlo, *mъrgati > morhaty, *kъrčьma > korčma*
**tъrt > tert:*	**vъrba > verba, *vъrxъ > verx, *zъrno > zerno, *čьrnъjь (> *černyj) > čornyj, *sъrpъ > serp.* Note that new *e* arising from *tъrt* also undergoes *'e > 'o* process but only if a hard dental follows *r.*
**tъlt > tovt:*	**vъlkъ > vovk [voǫk], *mъlčati > movčaty*
**tъlt > tovt:*	**kъlbasa > kovbasa [koǫbasa], *dъlgъ > dovh*

15. The *trъt*-formula

**trъt > tryt:*	**krъvavъjь > kryvavyj* vs *krov < *krъvъ* where *ъ* is in strong position, **drъžati > dryžati, *krъšiti > kryšyty*
**trъt > tryt:*	**trъvoga > tryvoha, *krъnica > krynyc'a, *grъměti > hrymity*
**tlъt > tlyt:*	**glъtati > hlytaty*
**tlъt > tlyt:*	**blъščati > blyščaty*

Many *trъt*-formula forms do not show the expected reflexes in the literary language but do so in the dialects: **slъza > sl'oza* but *slyza* (dial.); **krъstiti > xrestyty* because of *xrest < *krъstъ* (where *ъ* was strong) but also *xrystyty* (dial.); **drъva > drova* but *dryva* (dial.); **blъxa > bloxa* and *blyxa* (dial.); **jablъko > jabluko* and *jablyko* (dial.); **xrъbъtъ > xrebet* (likely by analogy to the oblique cases where the first *ъ* would be in strong position, that is, **xrъbъta > xrebta* — gen.). Note, strong *ъ, ь* in *trъt* develop as *ъ̯, ь̯* elsewhere.

16. *i* and *y* > *y* (orthographically *и*)

i and *y* merge completely. The resulting phoneme is a high front vowel but somewhat backed and lower than *i*, that is a sound very similar to Eng *i* in *sin* or to that represented by *y* in P. Thus, the same symbol *y*, used in transliterating both Ukr and R, represents entirely different sounds. A further complication can arise from the fact that this new phoneme is written *и* in Ukr, and this is sometimes confused with the value of the same symbol as used in other Cyrillic scripts (except Br) giving rise to the false impression that *i, y* > *i* as in S Sl. The merger of *i* and *y* either phonemically or phonetically is a frequent phenomenon in Slavic, but the Ukr reflex of this merger is unique.[28]

**lisъ* > *lys, *tri* > *try, *žiti* > *žyty*
**lysъjь* > *lysyj, *ryba* > *ryba, *ryti* > *ryty*

17. *'e, ь* > *'o*

This change occurs after *č, š, ž, j* before a hard consonant. Stress plays no role here as it does in R nor can this change occur in a final open syllable.

**čelo* > *čoló* (vs R *čeló*) but without change in *pleče* (cp. R *plečó*)
**ženatъjь* > *žonatyj, *ženiti sę* > *ženytys'a* because of *ni [n'i?]*
**šьvъ* > *šov, *čьrnъjь* > *čornyj* vs **čьrnь* > *čern'* because of *n'*
**šestъjь* > *šostyj* vs **šesti* > *šesty* (gen. of *šist'* < **šestь*)

The literary forms *l'on* < **lьnъ, l'odu* < **ledu* (gen. of *lid* < **ledъ*), *s'omyj* < **semъjь* are not typical of the language as a whole and seem to have originated in the northern dialects where *'e* > *'o* operates on rules more reminiscent of Br or R. All western and many eastern dialects as well have only *len, ledu, semyj.*

18. *je-* > *o-* if there is a front vowel (except *ь*) in the following syllable

**jesenь* > *osin', *jezero* > *ozero, *jedinъ* > *odyn, *jesetrъ* > *oseter, *jelenь* > *olen'* but **jego* > *jeho* (W Ukr). The modern literary *joho* is by analogy to the usual genitive singular *-oho.*

19. *e, o* > *i*

This change occurs when *e* or *o* are in syllables newly closed by the lost of a weak *ь, ъ*. For this reason, this process is often explained as compensatory lengthening, but *e, o* > *i* by no means occurs in every instance where *e* or *o* were followed by a weak jer. Therefore, this change may very well have an origin or origins other than the traditionally proposed compensatory lengthening.

**stolъ* > *stil* (but *stola,* gen.), **konjь* > *kin', *solь* > *sil', *vozъ*

[28] In colloquial Ukr at a normal speech tempo, *y* and *e* merge in unstressed syllables so that forms like *plesty* vs *plysty* are homophonous.

*> viz, *nosъ > nis, *kostь > kist', *nočь > nič, *mojь > mij, *semь > sim, *neslъ > nis* (but *nesla, nesty*), **večerъ > večir, *pečь > pič, *popelъ > popil, *kamenь > kamin'* (but *kamen'a,* gen.)

In initial position *o- > vi-:*

**ovьca > vivc'a, *osь > vis', *osmь > visim, *onъ > vin*

The major classes of exceptions to *e, o > i* are the following:

(a) new *e, o* arising from strong *ь, ъ:*

**sъnъ > son, *dьnь > den', *světьlъ > svitel (*gen. plural of *svitlo*), **dǫbъkъ > dubok, *věnьcь > vinec'*

Examples of *ь, ъ > i* are rare and are of analogical or morphological origin.

(b) new *e, o* arising from the pleophony of *tort*-formula forms:

**morzъ* (*> *morozъ*) *> moroz* (not **moriz*), **bergъ > bereh* (dial. *b'erih*), **versъ > veres, *boršьno > borošno, *soročьka > soročka*

e and *o* sometimes do exhibit this change (in specific morphological categories), but none of these are older than the seventeenth century.

**stornь* (*> *storonь*) *> storín* (gen. plural of *storona < *stornà*) but **vŏrnъ* (*> *vorónъ*) *> vorón* (gen. plural of *vorona*); **sterglъ* (*> *stereglъ*) *> sterih* vs **berzъ > berez* (gen. plural of *bereza*)

(c) *e* when followed by *ъ* unless there was stress shift to *e*

**klènъ > klen* vs **tetьka > *tétъka > títka, *jăsenъ > jásen* but **jăsenь* (a parallel form) *> jásin'*

20. *g > h*

**gora > hora, *dorga > doroha, *tęgnǫti > t'ahnuty, *jьgrati > hraty, *noga > noha, *ognь > vohon'*

Only in some few roots containing the PSl cluster *zg* do we find the velar stop retained as in **rozga > rizka [rizga], *mozgъ > mozok* but in the genitive *mizku* or *mozku [mizgu, mozgu], *bryzgati > bryzkaty [bryzgaty].*

21. *v > u̯, w, v, u*

(a) *v > u̯* after a vowel in final position or before a consonant. This feature is not marked orthographically as in Br:

**gněvъ > hniv [hn'iu̯], *pravьda > pravda [prau̯da], *krъvь > krov [krou̯].*

(b) *v > v, w* in free variation before vowels. *[v]* is usual before front vowels; *[w]* — before rounded vowels. **onъ > vin [v'in], *večerъ*

> *večir [več'ir], *virъ > vyr [vyr], *vǫzьko > vuz'ko [wuz'ko], *vasъ > vas [vas* or *was].*

(c) *v* > *v* elsewhere: **kъnęz'evьstvъ > kn'azivstv [kn'az'iμstv]* — genitive plural of *kn'azivstvo, *vъnesti > vnesty; w* is also possible but less common in this environment.

(d) In initial position *v/w* may vocalize, that is, *v/w* > *u:*

**vъnukъ > vnuk [wnuk, unuk], *vьčera > včora [wčora, učora].*

Orthographically no distinction is made between *v, w, ų*, all being written в: *вити [vyty], вухо [wuxo]* and *правда [praųda]*, but *v* > *u* in initial position is recognized: *внук* or *унук, вчора* or *учора*, etc., depending on the environment.

v > *u* has eliminated any distinction between *u* vs *v, w* in initial position. This applies in the main to the prefix and preposition *v* (< **vъ*) vs *u;* thus, *в нас* or *у нас* can be either a locative or genitive. The meaning is evident only from the context; the pronunciation *[vnas* or *unas]* depends on the environment. Similarly the prefixed forms like **vъbiti, *ubiti* merge; the pronunciation *[ubyty]*, spelled *убити*, or *[wbyty, vbyty]*, spelled *вбити*, depends on the environment, nøt on the meaning (cp. P *ubić* vs *wbić*). The same phenomenon has spread to *u-* or *v-* which were originally part of the root, thus, *вчити* or *учити, вдова* or *удова.*[29]

22. The palatalization of consonants

(a) Only PSl *ę, ě,* weak *ъ,* and *'i* < *e* palatalize a preceding consonant. *i* < *o* depending on the dialect may or may not palatalize but either pronunciation is considered correct in standard literary usage. In contrast to all the neighboring Slavic languages, Ukr has no palatalization when a consonant was followed by PSl *i* (now *y*), by *e* or by *e* < strong *ъ.*

**tęžьko > t'ažko, *tělo > tilo [t'ilo], *desętь > des'at'*

(Note both *s* and *t* are soft but *d* + *e* shows no trace of palatalization.)

**neslъ > nis [n'is]* but **nosъ > nis [nis* or *n'is]*
**postelь > postil' [post'il']* but **stolъ > stil [stil* or *st'il]*
**dьnь > den'* but **dědь > mid' [m'id'], *solь > sil' [sil'* or *s'il']*
but **lьvъ > lev*

(Note that *e* < strong *ъ* like etymological *e* shows no sign of having palatalized a preceding consonant whereas weak *ъ* always does.)

(b) *č, š, ž* dispalatalize except before *ě*$_3$, *i* < *e, o*

**nožě*$_3$ *> noži [nož'i], *šestь > šist' [š'ist'], *mǫčiti > mučyty*

[29] There exists a limited group of forms in literary Ukr in which *u* - *v* are not interchangeable such as *управа* 'administration' vs *вправа* 'exercise'; *усунути* 'remove, eliminate' vs *всунути* 'insert, slide into'.

The locative of such forms as *v noči* < **vъ noči, v duši* < **vъ duši* is of morphological origin, not a direct phonetic development (*i* < *ě*$_2$ is from hard declension). Dialectically the expected *y* < *i, nočy, v dušy*, is widely attested.

č, š, ž are also palatalized if the loss of *ъ* made them contiguous to *j*. If a vowel precedes the *č, š, ž*, they geminate.

**sъbožьje* > *zbižž'a, *nocьjǫ* > *ničč'u, *roztъržьje* > *roztorž'a*

The palatalization and gemination of *č, š, ž* is not common to all dialects nor is *ьje* > *'a* in neuters which seems to be morphologically conditioned, thus, **sъbožьje* > *zbiže* in western dialects.

(c) (1) *c', s', z'* (< 2nd and 3rd palatalization of *k, x, g*), *l'* (< *l'* + *j*) and *n'* (< *n* + *j*) all remain their palatal(ized) quality except before PSl *i, e, e* < *ь*. Thus *s', z', l'* and *n'* merge with *s, z, l* and *n* + *ę, ě*, weak *ь*, or *i* < *e*.

**granica* > *hranyc'a* but **granicejǫ* > *hranyceju*
**zeml'a* > *zeml'a* but **zeml'ejǫ* > *zemleju*[30]
**kon'ь* > *kin', *kon'a* > *kon'a* but **kon'ьmь* > *konem*[31]
**kъnęz'ь* > *kn'az', *kъnęz'a* > *kn'az'a* but **kъnęz'ьmь* > *kn'azem, *vьs'ь* (< **vьx-*) > *ves', *vьs'a* > *vs'a* but **vьs'ego* (< **vьxogo*) > *vseho* (dial.). The literary *vs'oho* is newer; **l'udъ* (< **ljudъ* < **leudъ*) > *l'ud* where *l'* < *lj* merges with *l'* in such examples as *lid [l'id]* < **ledъ*

(2) *r'* (< *r* + *j*) also merges with *r* + *ę, ě*, weak *ь*, or *i* < *e*, but later *r'* of all sources dispalatalizes in final position. As with all other consonants, there is no palatalization before PSl *i, e, e* < *ь*

**gor'ьkъjь* > *hirkyj* (cp. R *gor'kij*, P *gorzki*), **dvьrьmi* > *dvermy, *lěkar'ь* > *likar* but **lěkar'a* (gen.) > *likar'a, *mor'e* > *more* but **mor'a* (gen.) > *mor'a* or **mor'u* (dat.) > *mor'u*

(d) Labials are not distinctively palatalized.

Phonetic palatalization occurs only before *'i* < *ě* or *e*. In all other environments, labials either completely dispalatalize or develop a *j* off-glide between the labial and the following vowel. The latter occurs only before back vowels, usually *'a* < *ę*.

**popelъ* > *popil [pop'il], *mědъ* > *mid' [m'id'], *semь* > *sim, *golǫbь* > *holub* (cp. R *golub'*), **męso* (> **m'aso*) > *mjaso, *pętь* (> **p'at'*) > *pjat'*

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[30] Dialectically we have in the loc. the expected *na kony* < **na kon'i* or *na zemly* < **na zeml'i*. The literary *na kon'i, na zeml'i* are newer by analogy to the hard declension where loc. = *'i* < *ě*.

[31] See previous footnote.

Such examples as *bje* < **bьje(tь), pju* < **pьjǫ, zdorovja* < **sъdorvьje, krovju* < **krъvьjǫ* are sometimes cited but are not applicable in this context because *j* was there in PSl. Ukr orthography requires that any such sequence regardless of origin be indicated by writing an apostrophe between the labial and the following *iotized* vowel, that is, *м'ясо, п'ять, б'є, п'ю, здоров'я, кров'ю.* This is intended to mark the labials clearly as unpalatalized.

Labials remain palatalized before back vowels only when a palatalized consonant (especially a dental) precedes the labial itself. Thus, in *s'v'ato* < **svęto, v* was palatalized by *ę* (before *ę* > *'a*); *s* was then palatalized by regressive assimilation; in clusters of the type *s'v'* both members retain their palatalization. Thus, we have **svęto* > **sv'ato [s'v'ato]* but **vęzati* > **v'azaty* > *vjazaty*. However, assimilations of the kind **sv'ato* > *s'v'ato* occur only within the same root but not across morpheme boundaries; thus, in *zvjazaty* (< **sъvęzati*), *v'* > *vj* and *z* is unpalatalized because *z* is a prefix[32] (cp. R *связать* [*s'v'azat'*]).

These phonetic details are also incorporated into the orthography by stipulating that no apostrophe be written between a labial and an *iotized* vowel when the labial is preceded by a consonant belonging to the same root unless the consonant preceding the labial is *r*. Therefore, one writes *м'ясо* or *жаб'ячий* because in such environments a sequence like *m'a* or *b'a* cannot exist in modern Ukr — only *m, b*+*j*+vowel. In *зм'якнути*, the apostrophe is again required because *z* is a prefix, but in *тьмяний* or *різьбяр, t'* and *z'* are palatalized and belong to the same root as the palatalized labial. Thus, the spelling *мертвяк* would seem to indicate that the suffix *-jak* palatalizes both the *v* and *t* of *mertv-*; that is, *mert'v'ak* whereas in *черв'як* the same suffix cannot palatalize *v* because the preceding *r* cannot be palatalized in that environment. This is true of *черв'як* but not necessarily so of *мертвяк* which is equally often pronounced [*mertv'ak*]. It is spelled without the apostrophe merely because *tv* belong to the same root. The very same orthographic rule requires one to write *мавпячий* [*maʊpjačyj*], but *ʊ̯* cannot be palatalized and, therefore, the following labial cannot be palatalized. Similarly one writes *морквяний* but pronounces [*morkvjanyj*]. *v* could not palatalize unless *k* did also, but velars do not undergo assimilative palatalization even within the same root, that is, *квітка* [*kv'itka*], not [*k'v'itka*].

The point is that palatalized labials are not only rare but also phonologically irrelevant in Ukr. It, therefore, seems hardly worth the effort

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[32] Note that the voiced *z* (< **s* < **sъ*) has been generalized as the basic or underlying form of this prefix in Ukr. It naturally devoices before voiceless consonants. This is recognized orthographically only when *z* is followed by *к, п, т, ф, х (сказати, списати, схвалити* but *зшити, зсадити, зщипати* where *z* also devoices). Cp. *збити, зіб'ю* vs R *сбить* [*z'b'it'*], *собью.*

Note also that assimilation in palatalization functions in the same way before labials softened by *'i* < *ě, e*. Thus, **zvěrь* > **zv'ir [z'v'ir]* but **sъvěriti* > *zviryty [zv'iryty]* vs R *[z'v'er']* as well as *[s'v'er'it']*.

to introduce a complicated orthographic device to mark not their presence but their absence. Nevertheless, this feature has been introduced but not with complete success. The orthographic conventions only partially reflect the phonetic facts.

(e) There is only a nondistinctive palatalization of velars before *i* (either from *o* or of analogical origin): **gor'ьkъjь* > *hirkyj* [*h'irkyj*], or in the nominative plural of such adjectives as *dorohi* [*doroh'i*], *suxi* [*sux'i*], *korotki* [*korotk'i*]. The origin of this *i* is not exactly clear (possibly by contraction of the old accusative *-yjě* of the pronominal adjectives).

RUSSIAN

1. The second palatalization

k > *c:*	**kě₂na* > *cena*,	**kě₂lъjь* > *celyj*
g > *z':*	no clear examples in the modern language	
x > *s':*	**xě₂rъjь* > *seryj*	
kv > *kv':*	**kvě₂tъ* > *cvet*	
gv > *z'v':*	**gvě₂zda* > *zvezda*	

This palatalization has been eliminated at morpheme boundaries as *v ruke, na noge, v muxe* (cp. Ukr *v ruci, na nozi, v musi*) or in *pomogi, peki* (imperative of *pomoč', peč'*). These facts along with data from some northwestern dialects and from the Novgorod birch-barks give us grounds for believing that the second palatalization may never have taken place in northern E Sl or took place with only limited force. The existing examples can then be explained either as sporadic instances or as due to Church Slavic influence.

2. The third palatalization

k > *c:*	**otьk-* > *otec*, **ovьka* > *ovca*
g > *z':*	**kъnęg-* > *kn'az'*
x > *s':*	**vьx-* > *vs'-* (*ves', vs'a, vs'o*)

Documents (from the twelfth century on) from the northwestern R dialects provide many examples of unpalatalized *x* in the root **vьx-*.

3. *dl, tl* > *l*

**pletlъ* > *pl'ol*, **jědlъ* > *jel*, **mydlo* > *mylo*, **modliti sę* > *molit's'a*

4. The *ort-, olt*-formulae

**ŏrt* > *rat:*	**ŏrdlo* > *ralo*
**ôrt* > *rot:*	**ôrstъ* > *rost*

Spellings such as *rasti* < **ŏrsti, rabota* < **ôrbota,* etc. or the prefix *raz-/ras-* < **ôrz-* (*rassypat'* vs *rossyp'*) are the result of Church Slavic influence and are also supported by *akan'e.*

**ŏlt* > *lat:* **ŏlkamъjь* > *lakomyj*
**ôlt* > *lot:* **ôlkъtь* > *lokot'*

5. The *tort*-formula

**tort* > *torot:* **morzъ* > *moroz, *borda* > *boroda, *sъdorvъ* > *zdorov*
**tert* > *teret:* **bergъ* > *bereg, *berza* (> **ber'eza*) > *ber'oza*
**tolt* > *tolot:* **bolto* > *boloto, *zolto* > *zoloto, *golva* > *golova*
**telt* > *tolot:* **melko* > *moloko, *melti* > *molot'*

As is well known, literary R contains many *tort*-formula forms borrowed from Church Slavic. These, of course, have the regular S Sl reflexes of *tort*, thus, *glava, glasnyj, kratkij, sladkij, grad, mlečnyj, zdravije,* etc.

6. The reflexes of *ь̥, ъ̥*

ь̥ > *'e:* **dьnь* > *den', *pьnь* > *pen', *pьsъ* > *p'os, *lьgъkъjь* > *l'ogkij*

New *e* (< *ь̥*) undergoes the same *'e* > *'o* process as etymological *e.*

ъ̥ > *o:* **sъnъ* > *son, *mъxъ* > *mox, *vъšь* > *voš', *rъtъ* > *rot*
jь > *i:* **jьgrati* > *igrat', *jьz-* > *iz-, *jьměti* > *imet', *jьgъla* > *igla,* also *igolka* < **jьgъlъka.*

Russian also provides examples of *jь* > *i* in positions other than word initial, thus, *ja(j)ic* < **jajьcь* (gen. plural of *jajco* < **jajьce*), *vzaimnyj* < **vъzajьmьnъjь, dostoinstvo* < **dostojьnъstvo, tainstvo* < **tajьnъstvo* but *tajen* < **tajьnъ* (short form of *tajnyj* < **tajьnъjь*), *gostepriimnyj* but *prijom*, both containing **prijьm-*. (See p. 171.)

ь̥j > *ej:* **zmьjь* > *zmej, *pьji* > *pej, *šьja* > *šeja, *pǫtьjь* > *putej*
ъ̥j > *oj:* **tǫgъjь* > *tugoj, *xudъjь* > *xudoj, *suxъjь* > *suxoj, *čužьjь* (< **tjudj-*) > **čužej* > *čužoj*

Masculine singular adjectives such as *sinij, tretij, staryj, čistyj, belyj* are orthographically Church Slavonicisms made possible by *akan'e* and vowel reduction. Whether one wrote *staroj* or *staryj* is immaterial. Both would be pronounced *[starəj]*. Northern dialects without *akan'e* have the expected *sin'ej, staroj,* etc.

In weak position *ь, ъ* of *ьj* or *ъj* are regularly lost.

**zalěsьje* > *zales'je, *sъčęstьje* > *sčast'je, *perьja* > *per'ja, *sъpanьje* > *span'jo* (cp. P *spanie* where *j* merely palatalizes but disappears, or Ukr *spann'a* where it also disappears after bringing about gemination).

Forms such as *učenije, pon'atije,* etc. are the result of Church Slavic influence.

7. The reflex of *ě*

ě > *'e* in all environments: **lěto* > *leto, *jěsti* > *jest', *věra* > *vera. ě* thus merges completely with *e* in all respects except that *ě* does not undergo the *'e* > *'o* process. The few instances like *zv'ozdy* < **zvězdy* are easily explained as later developments by analogy to other plurals like *s'ostry, m'otly, žony* or *čọla* where *'o* < *e.*

8. The nasals

ę > *'a:* **męso* > *m'aso, *kъnęzь* > *kn'az', *porędъkъ* > *por'adok, *pętь* > *p'at'*

ǫ > *u:* **rǫkǫ* > *ruku, *dǫbъ* > *dub, *bǫdǫ* > *budu.*

9. *tj, ktĭ, gtĭ* > *č*

**noktь* > *noč', *světja* > *sveča, *mogti* > *moč', *pletje* (> **pleče*) > *plečo*

There are also many examples of **tj* > *šč* in Church Slavonic borrowings, thus, *trepetat', trepešču* vs Ukr *trepeču,* or *ovošč* vs Ukr *ovoč,* etc.

10. *dj* > *ž*

**medja* > *meža, *xodjǫ* > *xožu, *tjudjьjь* > *čužoj*

In Church Slavonic borrowings we encounter *dj* > *žd* as *roždenije, ubeždenije.*

11. *stj, skj, sk* + FV (> *šč*) > š'š'

**jьskjǫ* > *išču [iš'š'u]* (orth. *ищу,* first person singular of *iskat'*), **piskěti* > *piš'š'at'* (orth. *пищать*), **mostjǫ* > *mošču [moš'š'u].*

12. *zdj, zgj, zg* + FV > *žž* or *ž'ž'*

**jězdjǫ* > *[ježžu* or *jež'ž'u]* (orth. *езжу*), **vizgěti* > *[vižžat'* or *viž'ž'at']* (orth. *визжать*), **drozgьje* > *[drožžy* or *drož'ž'i]* (orth. *дрожжи*).

13. The epenthetic *l* is retained

**zemja* > *zeml'a, *stavjǫ* > *stavl'u, *vъl'ubjenъjy* > *vl'ubl'onnyj*

14. The *tъrt*-formula

**tъrt* > *tort:* **gъrdlo* > *gorlo, *tъrgъ* > *torg, *mъrgati* > *morgat', *kъrčьma* > *korčma*

**tъrt* > *t'ert:* **sъrdьce* > *serdce, *vъrxъ* > *verx, *zъrn'o* > *zerno* and *z'orna* (plural), **sъrpъ* > *serp, *čъrnь* > *čern'* vs **čъrnъjь* > *čọrnyj, *cъrkъvь* > *cerkov', *pъrvъjь* > *pervyj.*

Note that the new *e* arising in *tъrt* does not undergo *'e > 'o* process unless followed by a hard dental. In this instance a labial or a velar acts as a palatalized segment, thus, *verx, pervyj* develop the same as *serdce, čern'* (where the consonant following *ъr* was palatalized).

**tъlt > tolt:* **kъlbasa > kolbasa, *dъlgъ > dolg, *stъlbъ > stolb, *tъlkati > tolkat'*

**tьlt > tolt:* **vьlna > volna, *pьlnъjь > polnyj, *mьlčati > molčat', *žьltъjь > žǫltyj, *žьlčь > žǫlč', čьlnъ > čǫln*

15. The *trǫt*-formula

**trъt > trot:* **krъvavъjь > krovavyj, *drъžati > drožat', *krъšiti > krošit'*

**trьt > tr'et:* **trьvoga > trevoga, *grьměti > gremet'*

**tlъt > tlot:* **glъtati > glotat', *jablъko > jabloko*

**tlьt > tl'et:* **slьza > sleza, *blьsnǫti > blesnut'*

Note that in R there is no distinction between strong and weak *ъ, ь* in *trъt.*

16. *i* and *y*

i and *y* phonologically considered are usually said to be merely allophonic variants of a single phoneme, but phonetically they remain quite distinct. On the phonetic level, therefore, the R distribution of *i* and *y* is much as it was in PSl with the following exceptions:

(a) *gy, ky, xy > g'i, k'i, x'i: *pogybati > pogibat', *kyslъjь > kislyj, *xytrъjь > xitryj;* also at morpheme boundaries, **ruky > ruki, *nogy > nogi, *měxy > mexi* (nom. plural of *ruka, noga, mex*) vs *y* after other consonants.

(b) *i > y* wherever a preceding consonant dispalatalizes, that is, after *ž, š* and *c: *živъjь > [žyvoj]* (orth. *живой*), **šiti > šit [šyt']* (still written *шить*). With the exception of onomatopoeic forms such as *cykat'* or *cypl'ata* (from *cip-*, call of a chick), *cy < ci* arose for the most part analogically in forms like **ovci > ovcy, *granici > granicy* (gen. sing. and nom.-acc. plural) in place of the older *e < ě*$_3$.[33]

(c) *i > y* in such instances as *kot i p'os [kot y p'os], on id'ot [on yd'ot], s igloj [s ygloj], ot + igrat' > otygrat'.*

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[33] *ci* could arise only as a result of the second palatalization (**ki*$_1$, **kaj*) and this palatalization was eliminated (or never occurred) in R especially at morpheme boundaries, and *i*$_2$ never occurred except at morpheme boundaries. Therefore, instances of *ci* were rare in R. The nominative plural of such masculine forms as *otcy* may be a direct reflex of **otьci* but all of E Sl as well as P tends to replace the former nominative plural with the accusative plural. Thus, *otcy* may be of analogical origin.

(d) *yj* > *oj*: **myjǫ* > *moju*, **kryjǫ* > *kroju*.

17. *'e, 'ь,* > *'o*

The process occurs with every stressed *e*[34] including *'e* < *ę*, but not with *e* < *ě* provided that no palatalized segment follows. This means that there is no restriction on *'e* > *o* in final position:

**pletje* (> **pleče*) > *plečo*, **lice* > *lico* (cp. P *lice* and Ukr *pleče, lyce*), **vьs'e* > *vs'o*, **pьsъ* > *p'os*, **ovьsъ* > *ov'os*, **zelenъjь* > *zel'onyj*, **neslъ* > *n'os*, **medъ* > *m'od*, **ledъ* > *l'od*, **čьrnъjь* > *čǫrnyj*, but **čьrnь* > *čern'*, **čéla* > *čǫla* but **čeló* > *čęló*, **dešévъjь* > *dešǫvyj*, **séstry* > *s'óstry* but **sestrá* > *sestrá*.

Russian also has many instances of *'e* > *o*, arising at a later period (after *ž, š* dispalatalized), such as in *l'oža* < **ležę, od'oža, d'oševo, t'ošča* < **tьšča*. The second person singular forms like *dajoš, nes'oš* were also influenced by *dajot, nes'ot, dajom, nes'om*.

18. *je-* > *o-* when a front vowel (except *ь*) follows in the next syllable

**jesenь* > *osen'*, **jedinъ* > *odin*, **jezero* > *ozero*, **jesetrъ* > *os'otr*, **jelenь* > *olen'*, but **jemu* > *jemu*

19. The palatalization of consonants

(a) All PSl front vowels palatalized a preceding consonant. As elsewhere in Slavic this palatalization may be lost when the loss of a *ь* results in a new consonant cluster.

**plъtь* > *plot'* but **jedьno* > *odno*, **dьnь* > *den'* but **dьnьno* > *denno*, **męso* > *m'aso*, **medъ* (> **m'ed*) > *m'od*, **nesete* > *nes'ote*, **mědь* > *med'* but **mědьnъjь* > *mednyj*, **telęta* > *tel'ata*, **divьno* > *divno*.

(b) The PSl *l', n', r'* (< *lj, nj, rj*), *s'* and *z'* (< 2nd and 3rd palatalization of *x* and *g*) merge with the newly palatalized *l, n, r, s, z* + any front vowel and are retained as *l', n', r', s'* and *z'*. Thus, *l'* of *xval'u* < **xvaljo* merges with *l* + *ě* of **lěsъ* > *les; bur'a* < **burja* — with *r* + *e* of **rebra* > *r'obra; n'* of *kon'* < **konjь* — with *n* + *ь* of **dьnь* > *den'; s'* of **vьs'e* < **vьxo* — with *s* + *i* of *sila* < **sila; z'* of **kъnęz'ь* with *z* + *i* of *zima* < **zima*.

(c) *c* dispalatalizes in all environments as in **cěna, *otьcь, *ovьca* > *cena, otec, ovca* (cp. the Ukr *c'ina, otec', vivc'a*).

š, ž also dispalatalize except when geminated. *ž'ž'* arises in R as the regular reflex of *zdj, zgj* or *zg*+FV corresponding to Ukr, Br and P hard *ždž*.

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[34] The restricting of *'e* > *'o* to stressed syllables is only partially explainable in terms of the *akan'e* phenomenon which eliminates *o* in unstressed syllables. Not all the northern dialects (where *akan'e* is unknown) have *n'osú* (< **n'esú*).

ž'ž' can also arise in such rare instances as **žьžetъ >[ž'ž'ot]* orth. *ЖЖЁТ* but not in **sъžьglъ >[žžog],* orth. *СЖЁГ* where in the latter example the first *ž* arises as the result of assimilation.

Similarly *š'š'* is the regular reflex of *stj, skj, sk* + FV corresponding to hard *šč* in Ukr, Br and P. *š'š'* can also come about as the result of assimilation provided that *č* was the second member of the newly formed cluster, thus, **sъčęstьje >[š'š'ast'je]* orth. *СЧАСТЬЕ* but **sъšiti > [šš'yt']* orth. *СШИТЬ*.

(d) Soft labials are retained in word-final position:

**golǫbъ > golub', *krъvъ > krov', *se(d)mь > sem'* also as the result of the loss of unstressed *i* in imperatives such as **stavi > stav', *sypi > syp'*. However, labials dispalatalize when loss of *ъ* brings about a new cluster as **bъrati > brat', *pъšeno > pšeno, *mъstit > mstit'* vs **tьma > t'ma* or **lъstьcь > l'stec*.

There exist in modern R some instances of palatalized labials occurring in environments other than postvocalic (*m'aso*) or word-final position (*sem'*). These are limited almost exclusively to the environment before other palatalized labials or before *k'* (according to an older standard of pronunciation). Most such examples are, however, secondary, resulting from later assimilatory processes such as in *[v'v'ol]*[35] *< *vъvedlъ, [l'ub'v'i] < *l'ubъvi* or *[tr'ap'k'i] < *trę̂pъky* where neither *v* (from *vъ*) nor *b, p* + *ъ* could have been palatalized in Late PSl. The presence of palatalized labials, therefore, in this environment has little or nothing to do with an original palatalization by a weak *ъ* as can be seen in such later borrowings as *[im'b'ir', am'b'icija* or *lam'p'e*, also *lamp'e]*. Many other factors come into play: palatalization across morpheme boundaries, the presence of a permanently soft labial after the first labial, that is, *liv'm'a* vs *lam'p'e* or *lamp'e* because of *lampa, lampy, lampu*, etc. with hard *p*.

(e) Velars palatalize before *'i < y* (see No. 16 a) and *e*.[36]

ruke [*ruk'e*], *noge* [*nag'e*], *kožuxe* [*kʌžux'e*], *kem* [*k'em*]

Palatalized velars followed by any other vowel occur either in foreign borrowings such as *lik'or, leg'um* (from French *liqueur, legume*) or in analogical restructurings such as *tk'ot* (in place of the older *tčot* < **tъčetъ*).

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[35] Palatalization of the prefix *v* is regularly encountered only before *v' [v'v'ol]*, in free variation before other palatalized labials *[v'b'it'* or *vb'it']* but not before other segments except *j*, thus, **vъterti > [vt'er'et']* but **vъjěxati > [v'jexat']*. Palatalizations of this type at morpheme boundaries are usual only with *v* but not with *ob-*. That is, *v'v'ol* but *obv'ol, objom (ОБЪЁМ)*.

[36] In purely Slavic forms velars + *e* occur rather rarely. They are limited almost exclusively to these instances where one would expect the second palatalization. In addition to these sources, many dialects also exhibit the so-called progressive palatalization of velar in such forms as *[ruč'k'a, ol'x'a]*, etc. The antiquity of this phenomenon is not as yet established.

(f) Russian has also undergone extensive secondary regressive palatalizations. This occurs when a palatalized consonant by assimilations passes this feature to a preceding consonant or group thereof. This can apply equally to PSl clusters or to new clusters resulting from the loss of a weak ъ where an original palatalization was impossible. Thus, we have СНЕГ [*s'n'ek*] < **sněgъ* as well as СНИЗИТЬ [*s'n'iz'it'*] < **sъniziti*, ДВИГАТЬ [*d'v'igʌt'*] and ДВЕ [*d'v'e*] < **dъvě*, ПЯТНИЦА [*p'at'n'icʌ*] < **pętьnica*.

The antiquity of such palatalizations is difficult to judge. *s'* in *s'n'ek* may have arisen almost as soon as **ně* > **n'ě*, but *s'* of *s'n'iz'it'* only later after the loss of ъ. Alternatively both may have palatalized at the same time by a later assimilatory processes. In examples like *[p'at'n'icʌ]* where there existed a sequence C + ь + C + FV, it is impossible to say whether the first consonant ever underwent dispalatalization (as, for example, in *plotnyj* < **plьtьnъjь* or *xolodnyj* < **xolodьnъjь*) or whether it always retained its soft quality because of the following consonant which was always palatalized from the time of overall palatalization by front vowels. Another factor which must not be overlooked is that many of these palatalizations occur in forms which could hardly have existed or definitely did not exist in Late PSl or early R.[37] This problem in its totality, therefore, is only remotely connected with overall palatalizations of this period.

20. *Akan'e* and vowel reduction

In unstressed syllables, R does not retain mid-vowels. In describing this phenomenon, we must distinguish the first prestressed syllable from all other unstressed syllables.

Unstressed syllables	*hard cons.* + *a, o*	*š, ž, č* + *a, o*	*š, ž, c* + *e*	*soft consonant* + *e, a*
First prestressed	ʌ	ʌ *or* y	y *or* y^e	i *or* i^e
Elsewhere (strongly reduced vowels)	ə (ъ)	ə (ъ)	ə (ъ)	'ь ('ə)

Approximate position as described by Avanesov

i				y		u
	i^e	ь	y^e			
	e		ə		o	
			ʌ			
			a			

[37] For example, таинственный [*tajin's't'v'ennʌj*] or наследник [*nas'l'ed'n'ik*].

Examples and comments

(a) From column 1 we see that R completely merges unstressed *o* and *a* in favour of *a*. That is, unstressed *o* loses its rounding and is treated as any unstressed *a*. This is the origin of the term *akan'e* (from the verb *akat'* 'to pronounce *a*').

ГОЛОВА́ [*gəlʌvá*], *ЗАНЁС* [*zʌn'ós*], *ЗАНЕСЛА* [*zən'islá*], *ПОХОДИ́Л* [*pəxʌd'íl*], *СЛОВО* [*slóvə*], *БАБА* [*bábə*]

(b) The merger of *'e, 'a* with *'i* (column 4) is not as consistent as *a* and *o*. In *НЕСУ́, ТЯНУ́* may be heard a vowel merging completely with *i*, that is, *НЕСУ́, ТЯНУ́, ЛИСА́* > [*n'isú, t'inú, l'isá*] but in slower, more careful articulation *'e* and *'a* > i^e (a high front vowel but somewhat lower and less tense than *unstressed i*). Thus, *ЛИСА́* and *ЛЕСА́* (plural of *les*) may be homophonous [*l'isá*] but *ЛЕСА́* can also be [*l'i*^{e}*sá*]. The tendency to merge *'e, 'a* with *i* (*ikan'e*) is more marked when the following consonant is soft. The following examples are all given in the *ikan'e* variant.

ВЕРЕТЕНО́ [*v'ьr'ьt'inó*], *ПЕРЕВЕДЕНА́* [*p'ьr'ьv'ьd'iná*], *ЛЯГУШО́НОК* [*l'ьgušónək*], *ЧАСТОКО́Л* [*č'ьstʌkól*], *ВЫ́НЕСУ* [*výn'ьsu*], *ВЫ́ТЯНУ* [*výt'ьnu*]

In certain instances *'e* and *'a* need not always merge as, for instance, where this would destroy a morphological distinction. Thus, *БА́НЯ* (nom. sing.) and *БА́НЕ* (loc. sing.) are pronounced respectively [*bán'ə*] vs [*bán'ь*].

(c) The same considerations applying to *ЛЕСА́* [*l'isá*] apply equally to *ЖЕНА́* [*žynά*] or [*žy*^{e}*ná*]. That is, in quick speech prestressed *e* and *y* merge but in slower, more precise pronunciation *e* > y^e. The first variant is more common before a soft consonant, thus, *ЖЕНИ́Х* [*žyn'íx*].

The choice of pronouncing *ЖАРА́* [*žʌrá*] or [*žyrá*] is a different problem altogether — not based on the tempo of speech but on a regional difference. The latter is the older Moscow standard; the former — the newer, more generally recommended form. However, in certain roots and their derivatives such as *ЖАЛЕ́ТЬ, ЖАВЕ́ЛЬ, ЛОШАДЕ́Й* (also *ЛОШАДЯ́М, ЛОШАДЯ́МИ*), the accepted literary pronunciation is still [*žyl'ét', žyv'él', ləšyd'éj*].[38]

[38] It must be emphasized that the above is only a very meagre outline. Avanesov's fifth edition of *Russkoe literaturnoe proiznošenie*, 1972 devotes some twenty pages (58-79) to the same problem, and another twelve (152-164) to pronunciational problems with inflections — many of which are connected with stress. A full investigation would also have to include the adaption of foreign borrowings into R. All of this is beyond the scope of the present work.

BELORUSSIAN

1. The second palatalization

k > *c:* **kě₂na* > *cana, *kě₂lъjь* > *cęly, *vъ rǫkě₂* > *v rucę*
g > *z':* **na nogě₂* > *na naze, *na dorgě₂* > *na daroze*
x > *s':* **na strěxě₂* > *na strase, *na vьrxě₂* > *na verse*
kv > *cv:* **kvě₂tъ* > *cvet* but also *kvetka*
gv > *zv':* **gvě₂zda* > *zv'azda*

2. The third palatalization

k > *c:* **zajęk-* > *zajac, *granika* > *ɣranica*
g > *z':* **kъnęg-* > *kn'az'*
x > *s':* **vьx-* > *vs'* (*uves', us'a, us'o*)

3. *dl, tl* > *l*

**mydlo* > *myla, *pletla* > *pl'ala, *modliti se* > *malicca, *vedlъ* (> **v'elъ*) > *v'ow*

4. The *ort-, olt*-formulae

**ŏrt* > *rat:* **ŏrdlo* > *rala*
**ôrt* > *rot:* **ôrvьnъjь* > *rowny*
**ŏlt* > *lat:* **ŏlnьja* > *lan'*
**ôlt* > *lot:* **ôlkъtь* > *lokac'*

In many instances the original distribution of *a* vs *o* has been obliterated by *akan'e* as in **ôrbota* (> **robóta*) > *rabóta; *ôrsti* (> **rosti*) > *rasci* but **ôrstlъ* > **roslъ* > *ros; *ôrlьja* (> **rolьja*) > *rall'á*

5. The *tort*-formula

**tort* > *torot:* **borda* > *barada, *morzъ* > *maroz*
**tert* > *teret:* **berza* > *b'aroza, *bergъ* > *beraɣ*
**tolt* > *tolot:* **golva* > *ɣalava, *bolto* > *balota*
**telt* > *tolot:* **melko* > *malako, *velkti* > *valačy*

6. The reflexes of *ь̨, ъ̨*

ъ > *'e:* **dьnь* > *dzen', *ovьčьka* > *avečka, *pьnь* > *pen'*

The new *'e* < *ь̨* may also undergo the same rounding process as etymological *e;* see No. 16.

ъ > *o:* **rъtъ* > *rot, *vъšь* > *voš, *kǫsъkъ* > *kusok*
jь > *ø, i:* **jьměti* > *mec', *jьz* > *z* but **jьgъlъka* > *iɣolka* and *ɣolka, *jьgrati* > *iɣrac'* and *ɣrac', *jьmę* > *im'a* but *menavita* (possibly influenced by P *mianowicie*) and *m'anuška* both from the same root.

The instances of *jь* > *ø* are much less frequent than in Ukr and there are few roots in which *jь* > *ø* is the only form attested.

ъj > *yj:* **svętъjь (> *sv'atyj)* > *sv'aty* and so in masculine singular nominative of all adjectives

ьj > *ij:* **šьja (> *šija)* > *šyja, *bьjь (> *bij)* > *bi, *čьjь (> *čij)* > *čyj, *vьlčьjь (> *vowčij)* > *vowčy*

The loss of final *j* before *i* or *y* occurs in the nominative singular masculine of all adjectives (*dobry, p'aty, zabity, druɣi, pryneseny,* etc.). It also occurs in the imperative mood but only if *i* precedes, thus, *bi, pi* (< **bьjь, *pьjь*) vs *myj, kryj* (**mъjь* or **myjь, *krъjь* or **kryjь*?). Elsewhere *j* is retained where *i* or *y* precedes: **kyjь* > *kij* (nom. sing.), **šijь* > *šyj* (gen. plural of *šyja* < **šьja*).

-ьjь > *ej* in the genitive plural of the old *i*-stem: **kostьjь* > *kascej* instead of the expected *ij*.

In weak position *ь, ъ* in *ьj, ъj* are regularly lost; *j* will then, as in Ukr, bring about gemination of *d, t, s, z, l, č, š, ž* if a vowel precedes.

**žitьje* (> **žit'jo*) > *życc'o, *veselьje* > *v'aselle, *sъbožьje* > *zbożże, *pytanьje* > *pytanne, *nočьjǫ* > *nocču* but **kostьjǫ* > *kosc'u* (because of *s* preceding the *t*).

If in an initial syllable weak *ь, ъ* is preceded by a sonant, a prothetic vowel (usually *i*) will develop before the sonant.[39]

**mъxъ* > *mox* but **mъxu* > *imxu, *lьnъ* > *l'on* but **lьnu* > *il'nu, *rъžanъjь* > *iržany* and *aržany, *rъvati* > *irvac', *mьgla* > *imɣla* (also *imɣa*), **lьgati* > *ilɣac', *vьtorokъ* > *awtorak, *rъža* > *irža*

This prothetic vowel has also been extended to forms which never contained a weak jer, such as *iɣruša* (< **gruša*), *iskrypka, arabina* (cp. R *r'abina), imša* (cp. P *msza,* Cz *mše,* but Slk *omša*).[40] Most of these forms but not all can occur both with or without this prothetic vowel, thus, *irvac'* or *rvac', iɣruša* or *ɣruša, irža* or *rža* (as in Ukr), *stužka* or *istužka* (possibly from **vъztǫžьka* as diminutive of **vъztǫga;* cp. P *wstęga, wstążka*).

7. Reflexes of *ě*

ě > *'e:* **lěsъ* > *les, *měra* > *mera, *těnь* > *cen', *sěno* > *sena*

Thus, *ě* merges with etymological *e* undergoing the same processes as does the latter with the exception of *e* > *'o.*

**lězti, *nesti* > *lézci, nésci* but **dědъ, *medъ* > *dzed, m'od, *běgǫ,*

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[39] The same phenomenon is known in Ukr, but it is neither as extensive nor as regular as in Br.

[40] This term entered Slavic in the form *mьša* from Lat (probably through Old High Grm) but it entered Br from P long after the fall of the jers, that is, in the form *mša.*

**nesǫ > b'aɣú, n'asú* but *beɣ* vs *n'os < *běglъ, *neslъ; *běda, *věsna > b'adá, v'asná* but *bédy* vs *v'ósny*

The alternation *'a ~ 'o < 'e* (+ stress) vs *e* (+ stress) in such forms as *v'asná* vs *v'ósny, s'astrá* vs *s'óstry* has been extended to some nouns in which the root vowel was *ě*, not *e* as in **gnězdo > ɣn'azdó* vs *ɣn'ózdy* (instead of the expected *ɣn'ézdy*).

8. The nasals

*ę > 'a: *tęgnǫti > c'aɣnuc', *zętь > z'ac', *žętь > žac', *porędьkъ > paradak, *počęti > pačac'*

In neuters of the type **telę* (old *nt*-stems) we have two developments: *c'al'a* (regular) and *c'al'o* (by analogy to neuter of the type *žycc'o < *žitьje*). Both are accepted as literary — *c'al'a* or *c'al'o, jaɣn'a* or *jaɣn'o, paras'a* or *paras'o*.

*ǫ > u: *zǫbъ > zub, *sǫdъ > sud, *bǫdǫtь > buduc'*

9. *tj, ktĭ, gtĭ > č*

**světja > sv'ača, *letjǫ > l'aču, *noktь > noč*

Infinitives, the root of which ends in *k* have the expected reflex of *kti* (*> či*) *> čy* whereas when the root ends in *g*, there is a restructuring.

**pekti > p'ačy, *sěkti > s'ačy* but **mogti > maɣcy, *běgti > beɣčy.*[41]

10. The reflexes of *dj*

**dj > dž* where *d* and/or *dz'* still exists in other forms of the same root; **dj > ž* in all other environments

**xodjǫ > xadžu* because of *xadzic', xodzic', xod,* etc.
**sǫdjenъjь > sudžany* because of *sudzic', suddz'a, sud,* etc.
**medja > m'aža* since no allomorph of *m'až-, mež-* retains *d*.
**tjudjьjь* (*> *čužij*) *> čužy*

11. *stj, skj, sk* + FV *> šč*

**městjaninъ > meščanin, *pleskjetь > plešča* (3rd person sing. of *pl'askac'*), **skedrъjь > ščodry.*

12. *zdj, zgj, zg* + FV *> ždž*

**jězdjǫ > ježdžu]* orth. *езджу*, **gnězdjǫ > [ɣn'aždžu]* orth. *гнезджу*, **dьzdjь > [doždž]* orth. *дождж*, **drozgьje > [droždžy]* orth. *дрожджи*

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[41] In the dialects the expected *gti* (*> či*) *> čy* (e.g. *bečy* and *beč*) is still attested. The literary *-ɣčy* (as in *beɣčy*) is only one of several various restructurings such as *beɣc'i, bežc', bežč(y), bežty.* Infinitives of the type *p'ačy* have also undergone a similar variety of restructuring such as *p'akčy, p'akc'i, pekč, pekc'.*

13. The *tъrt*-formula

**tъrt > tort:* **gъrdъjь > ɣordy, *gъrbъ > ɣorb, *tъrgъ > torɣ*
**tъrt > t'ert:* **vъrxъ > verx, *čъrpati > *čęrpac', *vъrba > v'arba, *čъrnъjь > čorny* but **čъrnъ > čęrn'*

Note that a velar or labial after *ъr* function in the same way as a palatalized segment in that no *'e > o* takes place.

**tъlt > towt:* **kъlbasa > kawbasa, *tъlstъjь > towsty*
**tъlt > towt:* **vъlkъ > vowk, *pъlnъjь > powny*

In addition to these, there are several examples of deviant developments especially as regards *tъrt, tъrt: *čъrvonъjь* (> **čirvonyj*) > *čyrvony, *tъrčati > tyrčac'* (also *tarčac'*), **pъrxati > pyrxac', *mъrgati > miryac'* (also *maryac'*).

14. The *trъt*-formula

**trъt > tryt:* **krъvi > kryvi* (loc. of *krow* < **krъvъ*), **drъžati > dryžac', *drъvotъnikъ > dryvotnik, *krъšiti > kryšyc'*, also *bryvo* with *y* generalized from the oblique cases of *brъvъ*

Note the change of gender and declensional type as opposed to R *brov'* or P *brew* which are still feminine.

**trъt* (> **trit*) > *tryt:* **grъměti > ɣrymec', *trъstьje > trysc'o, *krъstiti > xryscic', *trъvati > tryvac', *krъnica > krynica*
**tlъt > tlyt:* **jablъko > jablyk* (note gender change), **glъtati > ɣlytac', *blъxa > blyxa*
**tlъt > tlit:* **blъščati > bliščac', *slъza > sliza* (dial.).

As in Ukr, strong *ъ, ь* in *trъt* in Br develop as *ъ, ь* in other environments.

15. *i* and *y*

i and *y* phonologically considered are said to be merely allophonic variants of a single phoneme, but phonetically they remain quite distinct.[42] On the phonetic levels, therefore, the Br distribution of *i* and *y* is much as it was in PSl with the following exceptions:

(a) *gy, ky, xy > ɣ'i, k'i, x'i:* **kyslъjь > kisly, *gynǫti > ɣinuc', *xytrъjь > xitry,* also at morpheme boundaries as in *ruki* vs *ryby* (gen. sing. from **rǫky* and **ryby*); *salodki, suxi, daraɣi*

[42] This, of course, is the same analysis usually applied to R, and as in that language, Br *i* and *y* (orth. *i* and *ы*) are respectively a high front palatalizing vowel and a high back (somewhat centralized) but unrounded vowel. *[y]* can occur only after nonpalatalized consonants and *['ij]* in all other environments.

(masc. nom. sing. ending from *y* < **ъjь*) vs *-y* after any other consonant; *raki, beraɣi, m'axi* (nom. plural masc. of *mex* < **mĕxъ* vs *-y* elsewhere).

(b) *i* > *y* wherever a preceding consonant dispalatalized, that is, after *č, š, ž, r* and *c: *čistъjь* > *čysty, *šiti* > *šyc', *žiti* > *žyc', *griva* > *ɣryva, *ulici* > *vulicy* (loc. sing.), also in forms like *ručcy, došcy, usmešcy* (from Older Br *ručci, došci, usmešci*) where *i* had replaced the expected *'e* < *ě* in the locative under the influence of the soft declension.

(c) *i* > *y* in such instances as *kot* i *p'os [kot y p'os], jon išow [jon yšow], od + isci [adysci], z + iɣolkaj [zyɣolkaj].*

16. *'e, 'ъ* > *'o*

This process occurs with every stressed *'e* or new *'e* < *ę* not followed by a palatalized consonant, that is, nonpalatalized in Late PSl. Instances of *ě* > *'e* > *'o* are rare and are of analogical origin.

**lъgъkъjь* (> **l'eɣkyj*) > *l'oɣki, *medъ* > *m'od, *veselъjь* > *v'as'oly* vs *v'aselle* < **veselъje, *ledъ* > *l'od, *pьsъ* (> **p'ъsъ* or **p'es*) > *p'os, *šestъjь* > *šosty* vs *šęsc'* < **šestь, *ovьsъ* (> **ov'es*) > *av'os, *lьnъ* (> **l'en*) > *l'on* vs *dzen'* < **dьnь, *berza* (> **b'er'eza* > **b'ar'oza*) > *b'aroza* vs *b'areznik* (< **b'ar'ez'nik*), **tьmьnъjь* (> **t'emnyj*) > *c'omny, *tъplъjь* (> **t'eplyj*) > *c'oply*

Compare also the nominative plural of such forms as *sestry > *s'óstry, *ščeky* > *ščóki, *sela* > *s'óly* (*y* replaces *a* as the nom. plural in all neuters) as opposed to the nominative singular *s'astrá, ščaká, s'aló* where *e* was unstressed; similarly *n'os* (< **neslъ*) vs *n'asú* (< **nesǫ*); *kl'on* vs *kl'aný, žónka* (< **ženъka*) vs *ažénicca* (< **oženitь sę* — 3rd person sing.) or *žankí* (nom. plural of *žonka*) and *žanáty* (< **ženatъjь*).[43]

The problem of *'e* > *'o* in final position is complicated by the fact that this feature is regularly encountered in the northeastern dialects but unknown in the southwestern ones (cp. the R *licó* vs Ukr *lycé* and P *lice*). The standard language has opted for a compromise. It uses the *o*-forms in: (a) neuters of the former *jo*-stems such as **žitьje* > *žycc'o, *pletje* (> **pleče*) > *pl'ačo, *jajьko* (> **jajьce*) > *jajco,* and in (b) nonpersonal pronouns such as **moje* > *majo, *vьs'e* > *us'o, *čьje* > *čyjo.* However, the opposite applies in the choice of forms for the second person plural in verbs of the type **nesete*

[43] Since *akan'e* and *jakan'e* have erased the distinction *e* vs *o* in unstressed syllables, we have no way of determining whether unstressed *e* also underwent *e* > *o*, that is, did **sestrá* > **s'ostrá* > *s'astrá* or **sestrá* > *s'astrá*. We can only rely on those SW dialects which are untouched by *akan'e*. Here indeed we do find examples of unstressed *e* > *o* but only after *č, š, ž;* after other consonants it is rare and inconsistent. Thus, we find *čoló* (< **čelo*) but *s'eló* (< **selo*).

> *nes'ace* (in the SW) but *n'asic'o* (in the NE). Here, the literary language uses *o*-less forms.

17. *je-* > *o-* when a front vowel (except *ъ*) followed in the next syllable.

**jesenъ* (> **os'en'*) > *vosen'*, **jelenъ* (> **ol'en'*) > *alen'*, **jedinъ* (> **od'in*) > *adzin*, **jezero* (> **ozero*) > *vozera*, **ježikъ* (> **ožik*) > *vožyk* but no change in **jego*, **jemu* (now *jaɣo*, *jamu*) and the like because of the back vowel following *je-*, nor in **jedlъ* > *jel'* (now only in *jel'nik*) because of *-ъ*.

18. *g* > ɣ (voiced velar fricative)[44]

**gora* > *ɣara*, **dorga* > *daroɣa*, **tęgnǫti* > *c'aɣnuc'*, **jьgrati* > *iɣrac'*, **ognъ* > *aɣon*

Only in some few roots containing the PSl cluster *zg* is *g* reserved as a velar stop as in **rozgy* > *[rozɣi]* orth. РОЗГІ, **mozgъ* > *[mozɣ]* orth. МОЗГ.

19. *v* > *w*, *u*

(a) *v* > *w* (bilabial glide written *ў*) after a vowel and before a consonant in initial position: **gnĕvъ* > *ɣnew*, **pravьda* > *prawda*, **krъvь* > *krow*, **vьdova* > *wdava*, **vъnukъ* > *wnuk*.

(b) *v* > *u* in initial position if a consonant precedes: *jana wdava* but *ad udavy; za wnuka* but *jon unúk*. This feature (also recognized orthographically) has led to the loss of the distinction between **u-* vs **vъ-* — both as a prefix and a preposition. Thus, the use of *u nas* vs *w nas* does not depend on the meaning (as in R *u nas* vs *v nas*) but on the environment.

(c) *v* is a labial fricative elsewhere — a bilabial before *o*, *u* but a labiodental before other vowels. This detail is not marked orthographically: **večerъ* > *večar*, **větrъ* > *vecer*, **govoriti* > *ɣavaryc'*.

20. Palatalization of consonants

(a) All PSl front vowels palatalized a preceding consonant. As elsewhere in Slavic this palatalization may be lost when the loss of a weak jer results in new consonant clusters.

**dьnь* > *dzen'* vs *dn'a* (gen. sing. from **dьne* with new ending) or *dz'onny* (< **dьnьnъjь*) with hard *n*; **pętь* > *p'ac'*, **desętero* > *dzes'acera*, **mědь* > *medz'*, **medъ* > *m'od*, **nesete* > *nes'ace*, **lьgъkъjь* > *l'oɣki*, **tęžьko* > *c'ažka*, **telę* > *c'al'a*, **sestra* > *s'astrá* or *s'óstry* (nom. plural), **diko* > *dzika*.

(b) As noted in several of the examples *t'* > *c'* and *d'* > *dz'*. This also

[44] In many textbooks the symbol *h* is used to transcribe the Cyrillic *г* as used in Br. This gives the false impression that PSl *g* > *h* in Br as in Cz, Slk or Ukr. It is, therefore, better to use ɣ representing the voiced counterpart of *x*.

occurs in the clusters *tv'* and *dv'*: **tvьrdъjь* > *cv'ordy*, **dvьri* > *dzvery*, **dъvě* (> **d'v'e*) > *dzve*.

(c) The PSl *l'*, *n'*, *r'* (< *lj*, *nj*, *rj*) merge with the newly palatalized *l*, *n*, *r* + any front vowel. *l'* and *n'* of both sources are retained, but *r'* dispalatalizes in all environments.

**l'udъ* > *l'ud*, **lěsъ* > *les*, **zeml'a* > *z'aml'a*, **ledъ* > *l'od*, **kon'ь* > *kon'*, **dьnь* > *dzen'*, **sъměn'ǫ* > *zm'an'u*, **nesǫ* > *n'asu*, **lěkar'ь*, **lěkar'a* > *lekar*, *lekara*, **bur'a* > *bura*, **porędъkъ* (> **por'adok*) > *paradak*, **rěpa* (> **r'epa*) > *rępa*, **gor'ьkъjь* > *ɣorki*, **mor'e* > *mora*.

(d) *s'*, *z'* from second and third palatalizations of *x* and *g*. Now *s'* and *z'* of this origin differ in no way from *s*, *z* + front vowel:

**strěxě*$_2$ (> **str'es'e*) > *strase*, **nogě*$_2$ (> **noz'e*) > *naze*.

(e) *č*, *š*, *ž*, *c* dispalatalize in all environments:

**čistъjь* > *čysty*, **šiti* > *šyc'*, **žiti* > *žyc'*, **rǫkě*$_2$ (> **ruc'e*) > *rucę*, **kě*$_2$*na* (> **c'ena*) > *cana* (cp. Ukr *ruci*, *cina*)

This dispalatalization also occurs with geminated *č*, *š*, *ž* in such forms as **sъbožьje* (> **zbož'ž'e*) > *zbožža*, **nočьjǫ* (> **noč'č'u*) > *nočču*, **myšьjǫ* (> **myš'š'u*) > *myššu* (cp. Ukr *zbižž'a*, *ničč'u*, etc.).

(f) Soft labials dispalatalize unless followed by a vowel:

**golǫbъ* > *ɣolub* but **robętь* > *rob'ac'*, **se(d)mь* > *sem* but **se(d)mi* > *s'ami [s'am'i]*, **l'ubъvь* > *l'ubow* but **l'ubъvi* > *l'ubvi [l'ubv'i]*.

(g) Velars palatalize before *i* (< *y*; see No. 15 a) and *e* which occurs mainly in borrowings such as *kepski [k'epsk'i]* from P *kiepski*.

21. *Akan'e* and Belorussian orthography

Br like R eliminates *e*, *o* in unstressed syllables, but unlike R incorporates this feature into its orthography. The types of *akan'e* and *jakan'e*[45] extant in the dialects are many and varied; standard Br, however, is based on the central dialects the main features of which are:

(a) In the first prestressed syllable both *e*, *o* > *a*:

**nogá* > *naɣá*, **nesǫ* > *n'asú*, **nesla* > *n'aslá*, **medovъjь* > *m'adóvy*, **soliti* > *salic'*, **čьtyri* > *čatýry*, **strěla* > *stralá*, **cěniti* > *caníc'*

[45] *Jakan'e* refers specifically to those processes occurring in prestressed syllables beginning with a palatalized consonant, whereas *akan'e* refers to processes occurring in other prestressed syllables. Thus, *n'esú* > *n'asú* or *n'isú* is an example of *jakan'e*, *stolý* > *stalý* or *oz'ory* > *az'ory* are examples of *akan'e*.

(b) In other prestressed syllables *e, o* > *a* if the preceding consonant was always hard or later dispalatalized in Br.

**golova* > *ɣalavá, *govoriti* > *ɣavarýc', *položiti* > *palažýc', *čereda* > *čaradá* (since *č'* > *č*), **želǫdy* > *žaludý, *regotati* > *raɣatác', *šelestěti* > *šal'ascéc'*[46]

(c) When this other prestressed syllable begins with a soft consonant, then Br specialists differ. Some recommend *'a* as the correct pronunciation in forms like *n'as'acé* (< **neset'e*); others recommend *nes'ac'e* or even a vowel between *'a* and *'e*.

In any event this syllable is not specially marked orthographically. Thus, we write *ЗЯ́ЛЕНЬ, ЗЯЛЁНЫ*, but *ЗЕЛЯНЕ́ЦЬ; ЛЯСНІ́К* but *ЛЕСНІКІ́; БЯРЎ* but *БЕРАЦЕ́: ВЯДЗЎ* but *ВЕДЗЯЦЕ́; КЛЯНЎ* but *КЛЕНЯЦЕ́* (from *КЛЯСЦІ́*). However, in some forms we encounter spellings such as *ЦЯЖКАВА́ТЫ* because of *ЦЯ́ЖКА* (< **tęžьko)* or *ЦЯГЛАВЫ́* because of *ЦЯГНЎЦЬ* (< **tęgnǫti*). The pronunciation would be the very same if spelled *ЦЕЖКАВА́ТЫ* or *ЦЕГЛАВЫ́*. The spelling *е* vs *я* depends on whether *'e* or *'a* occurs under stress in another form of the same root, thus, *ЦЯЖКАВА́ТЫ* because of *ЦЯ́ЖКА* but *ЛЕСНІКІ́* because of *ЛЕС*.

(d) In poststressed position *e, o* > *a* if the preceding consonant is hard:

**gorodъmь* > *ɣóradam, *slovo* > *slóva, *dobrogo* > *dóbraɣa, *beregъ* > *béraɣ, *kažeši* > *kážaš, *pišemъ* > *píšam, *šeръče(tь)* > *šépča, *mor'e* > *móra, *vyuče(o)nъjь* > *vývučany*

(e) If in poststressed position the vowel is preceded by a soft consonant, we have the same problem as in preprestressed syllables. For etymological reasons we write *ПА́МЯЦЬ* < **pamętь* but *ВО́СЕНЬ* (< **osenь*) < **jesenь*. The poststressed vowel in either case has the same value phonetically.[47] Thus, *ЛЕ́ЗЕ* (3rd person sing. of *ЛЕЗЦІ*) could just as easily be spelled *ЛЕ́ЗЯ* except that *е* (< **etь*) is historically justified and still occurs under stress (*БЯРЭ́, ВЯЗЕ́*). Similarly *НО́ВАЯ* (fem. sing.) and *НО́ВАЕ* (neuter sing.) are homophonous as are *ПЫТА́ННЕ* (nom. sing.) and *ПЫТА́ННЯ* (nom. plural); the different spelling merely marks a morphological difference.

As a final remark it is interesting to note that Br with the exception of certain northeastern dialects does not know the type of vowel reduction as does R in all but the first prestressed syllable. For example, R *ВОДА, СТОЛЫ* and Br *ВАДА, СТАЛЫ* are phonetically the same, but in Br forms like *МАЛАДЫ́,*

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[46] Whenever a syllable containing *o* or *e* (of whatever origin) bears the stress in another form, then *o* or *e* must reappear orthographically. Cp. *nóɣi, nésci, n'os* (< **nesl*ъ), *m'od, sol', stręly, cęniš, ɣalówny, ɣavóryš, žólud,* etc.

[47] The same disagreement arises here as with preprestressed syllables. Such pronunciations as *pam'ac', pam'ec'* or *pam'äc'* are all recommended by various authorities, but no one maintains that the poststressed vowels of *памяць* vs *восень* be pronounced differently merely because of a difference in spelling.

ГАЛАВА́, ЖАЛУДО́ВЫ, the vowel of the first syllable is a full low back vowel, not *[ə]* as in R. Similarly the *e* of *НЕСЯЦЕ́* or of *ВО́СЕНЬ* does not reduce to *['ə]* as R but remains either a mid-front vowel *['e]* or lowers to *['a].*

A Comparison of the East Slavic languages

	Proto-Slavic	*Russian*	*Ukrainian*	*Belorussian*
1.	k + 2nd and 3rd palat.	c	c'	c
	g	z'	z'	z'
	x	s'	s'	s'
	kv	cv	cv/kv	cv/kv
	gv	zv	zv	zv
		2nd palat. lost at morpheme boundaries		
2.	dl, tl	l	l	l
3.	ŏrt	rat	rat	rat
	ŏrt	rot	rot	rot
	ŏlt	lat	lat	lat
	ŏlt	lot	lot	lot
4.	tort	torot	torot	torot
	tert	teret	teret	teret
	tolt, telt	tolot	tolot	tolot
5.	ъ	o	o	o
	ь	'e	e	'e
6.	ěj, yj	oj	yj	yj
	ěj, ij	'ej		ij
	jь-	i-	ø, i	ø, i
7.	r + ъ, ь + t-*	rt-	irt — *not consistently attested*	i *or* art *more consistently attested*
8.	je-	o-	o-	o-
	ju-	u-	u-	u-
9.	tj, kt̆, gt̆j	č	č	č
10.	dj	ž	ž/dž	ž/dž
11.	stj, skj, sk + FV	š'	šč	šč
	zdj, zgj, zg + FV	ž *or* ž'	ždž	ždž
11.	*epenthetic* l	*retained*	*retained*	*retained*
13.	tъrt	tort	tort	tort
	tьrt	t'ert	tert	t'ert
	tъlt, tьlt	tolt	tovt	towt

* *r* here represents any sonant, that is, *r, l, m, n, v*

	Proto-Slavic	*Russian*	*Ukrainian*	*Belorussian*
14.	tr̥t	trot	tryt	tryt
	tr̥̆t	tr'et	-	-
	tl̥t	tlot	tlyt	tlyt
	tl̥̆t	tl'et		tl'it
15.	ǫ	u	u	u
	ę	'a	'a	'a
16.	ě	'e	'i	'e
17.	'i	y		'i
	y	y (ы)	y (и)	y (ы)
18.		*only under stress*	*regardless of stress*	*only under stress*
	'et°	'et° > 'ot°	'et° > 'o *only after* č, š, ž, j	et° > 'ot°
	-e *(finally)*	-e > o	*never in final position*	-e > 'o *(morphologically conditioned)*
19.	ot̥, ŏ	*no change*	'i/i	*no change*
	et̥, ŏ		'i	
20.	g	g	h	ɣ
21.	*overall palatalization by front vowels*	*all front vowels palatalized a preceding consonant*	*only* ě, ę *and weak jer palatalized*	*all front vowels palatalized a preceding consonant*
	lj > l'	l'	l'*	l'
	l + FV			
	nj > n'	n'	n'	n'
	n + FV			
	rj > r'	r'	r' *only before vowels*	r' > r *in all environments*
	r + FV			
	t + FV	t'	t'	c'
	d + FV	d'	d'	dz'
	p + FV**	p'	p' *retained only before* 'i < ě, e; p'V > pjV, p' > p *elsewhere*	p' *retained before* V, *lost elsewhere*
	č	*palatalization retained*	*palatalization lost*	*palatalization lost*
	š, ž	*palatalization lost*	*palatalization lost*	*palatalization lost*
	c	*palatalization lost*	*palatalization retained*	*palatalization lost*
	k, g, x + y	k', g', x' + i	k, h, x + y	k', ɣ', x' + i
22.	unstressed vowels	akan'e and ikan'e *in the first prestressed syllable*	e (< e, ŏ) *and* y (< i, y) *tend to merge*	*strong* akan'e *and* jakan'e *in prestressed syllable and* akan'e *in other unstressed syllables*
		strongly reduced elsewhere	*very little vowel reduction in other circumstances*	

	Proto-Slavic	*Russian*	*Ukrainian*	*Belorussian*
23.	v	*as a labiodental*	*labiodental before* FV; w *before BV;* ŭ *elsewhere*	*as in Ukr*

* In this and all other examples in Ukr, it is understood that palatalization is always lost before *i, e, ь*.
** *p* here represents any labial

BULGARIAN

1. The second palatalization

   k > *c:* **kě̯₁lъ* > *c'al*, **kě̯₁na* > *cena*
   g > *z:* **nogě̯₁* > *noze*
   x > *s:* **volxi₁* > *vlasi*
   kv > *cv:* **kvě̯₁tъ* > *cv'at*
   gv > *zv:* **gvě̯₁zda* > *zvezda*

2. The third palatalization

   k > *c:* **ovьka* > *ovca*
   g > *z:* **jęga* > *eza*, **vitęg-* > *vitez*
   x > *ь:* **vьx-* > *vs-* (as in *vs'akak, vsički, vsemogašt)*

3. *tl, dl* > *l*

   **pletlъ* > *plel*
   **sědadlo* > *sedalo*

4. *ort-, olt-* > *rat, lat*

   **ŏrdlo* > *ralo*, **ôrzumъ* > *razum*
   **ŏlkomъ* > *lakom*, **ôlkъtъ* > *lakət*

5. The *tort*-formula

   **tort* > *trat:* **vorna* > *vrana*
   **tert* > *trět:* **bergъ* > *br'ag*, **beržьnъ* > *brežen*
   **tolt* > *tlat:* **zolto* > *zlato*
   **telt* > *tlět:* **melko* > *ml'ako*, **melčьnъ* > *mlečen*

6. The reflexes of *ь̯, ъ̯*

   ь̯ > *e:* **dьnъ* > *den*, **lьnъ* > *len*
   ъ̯ > *ə:* **sъnъ* > *sən*, **soldъkъ* > *sladək*

   There are numerous instances where *ъ* > *ə* instead of the expected *e*; this is particularly true where weak *ъ* vocalized, thus, **mъgla* > *məgla*, **stъklo* > *stəklo*. This could be because *ə* is often used as an insert vowel, for exam-

ple, **mǫdrъ > *mədr > mədər; *dobrъ > *dobr > dobər; *ǫglь > *əgl > əgəl.* Therefore, the *ə* in *məgla* may be secondary — not **mьgla > məgla* but **mьgla > *mgla > məgla.* Similarly, *ə* in *pən < *pьnь* may be a generalization from the forms where *ь* was weak. That is, Blg has *pən, pəna, pənove*, not **pen, *pna,* (*< *pьna*), **pnove*, the *ə* in the nominative singular having arisen in the other cases to break up the cluster.

jь > i:	**jьskra > iskra, *jьmę > ime*
ьj, ъj > ij:	**šьja > šija, *pьješь > pieš*
ьj, ъj > ø	in weak position: **cvětьje > cvete, *pytanьje > pitane* but **učenьje > učenie* and the like are Church Slavicisms or borrowings from R.

7. *ktĭ, gtĭ, tj > št*

   **noktь > nošt, *světja > svešt*

8. *dj > žd*

   **medja > mežda, *gordjaninъ > graždanin*

9. *stj, skj, sk* + FV *> št*

   **skьrbavъ > štərbav, *tьstja > təšta, *ǫgliskja > vəglišta*

10. *zdj, zgj, zg* + FV *> žd*

    **dьzdjь > dəžd*

11. Epenthetic *l* is lost

    **zemja > zem'a, *kupjǫ > kup'ə (купя)*

12. The *tьrt-* and *trьt*-formulae

    **tьrt, *tьrt, *trьt, *trьt > tərt* or *trət:*

    tərt usually occurs when only one consonant follows *r* but *trət* usually when two or more consonants follow *r:*

    **sъmьrtь > smərt* but **smrətnik*[48] *< *smьrtnik < *sъmьrtьnikъ; *vьrba > vərba* but *vrəbnica < *vьrbnica < *vьrbьnica; *gьrni > gərne* but *grənci < *gərnci < *gьrnьci; *krъvь > krəv, krəven, krəvnina* but *kərvav, kərvi.*

    Since the number of consonants following *r* refers to the situation after the lost of weak jers, it is evident that the final resolution of this problem was a later development in Blg. It is also evident that root appearing in various morphological forms or with various affixes is subject to analogical levelings or generalizations whereby any derivation may bring about an alternation in the root. Thus, we get *grəm* (*< *grъmъ*), *grəb* (*< *gъrbъ*) but *gərmove,*

[48] Now *smərtnik* by analogy to *smərt.*

gərbove (nom. plural) in spite of the fact that no second consonant follows the *m* or *b* possibly because the addition of a suffix often triggers a change on the order of the *ər/rə* sequences.

13. The *tъlt-* and *tlъt*-formulae

**tъlt, *tьlt, *tlъt, *tlьt* > *təlt* or *tlət*
təlt occurs when one consonant follows *l*
tlət when two or more consonants follow *l*

**slьza* > *səlza* but *slənce* < **sъlnce* < **sъlnьce*
**dъlgъ* > *dəlg* vs *dlәžni* < **dьlžni* < **dьlžьni*

The same considerations apply here as with No. 12.

14. *y* and *i* > *i*

**synъ* > *sin*
**sin'ь* > *sin*

15. The nasals

ǫ > *ə:*	**pǫtь* > *pət*, **rǫka* > *rəka*
ę > *e:*	**telę* > *tele*, **pamętь* > *pamet*
ję- > *e-:*	**językъ* > *ezik*

There are some examples in the literary literature (more dialectally) of the so-called mixing of nasals originating from those regions where *ę* was a lower and/or more centralized vowel thus tending to merge with *ъ* < *ǫ*. If *ę* or its reflex later loses its power to palatalize or where no palatalized-nonpalatalized contrast is possible, *ę* and *ǫ* will merge. Thus, if **rǫka* > *rəka* or *raka*, and **męso* > *m'əso, m'asa* or *m'äsa,* the reflexes of *ǫ* and *ę* will merge completely if *m'* > *m*. This is why most examples of "mixing of nasals" occur after *č, š, ž, j* where no hard-soft contrast existed, thus, **žętva* > *žətva* and *žetva, *šępa* > *šəpa* and *šepa, *językъ* > *jəzik* (dial.).

16. The reflexes of *ě*

ě > *'a* under stress before hard consonants
ě > *e* elsewhere

**větrъ* > *v'atər* vs **větrьcь* > *vetrec*
**bělъ* > *b'al* vs **běli* > *beli*
**rědъko* > *r'adko* vs **rěka* > *reka*
**xlěbъ* > *xl'ab* vs **xlěbьnъ* > *xleben*
**sněgъ* > *sn'ag* vs **sněžьnъ* > *snežen*

17. The palatalization of consonants

(a) It is quite probable that Blg once experienced overall palatalization of consonants by all front vowels. This is later restructured.

(b) All front vowels lose their power to palatalize:

'i > i, 'e > e (< e, ъ, ę, ě)

(c) Palatalization is lost in final position.

(d) Palatalization is retained only when a back vowel follows:

(1) *l', n', r' <* PSl *lj, nj, rj:*

*l'ude < *l'udъje (l'u₂ < leu)* vs *učitel < *učitelъ (l'< ljъ); pol'a < *pol'a (l'a < lja)* vs *pole (le < l'e < lje), polski < *polъskъjь; izmen'ə < *jьzměn'ǫ (n'ǫ < njǫ)* vs *izmenen (ne < n'e < nje); mor'a < *mor'a (r'a < rja)* vs *more (re < r'e < rje)*

(2) *p', b', m', v'* after loss of epenthetic *l:*

zem'a (m'a < ml'a < mja); lep'ə (p'ə < pl'ǫ) vs *lepen (< *lěpl'enъ < *lěpjenъ)*

(3) *'a < ě* palatalizes all consonants but not *e < ě:*

*sn'ag < *sněgъ, l'ato < *lěto, m'asto < *město, c'al < *cělъ* but *snežen < *sněžьnъ*

(4) weak jer + *j:*

*brat'a < *bratьja* vs *cvete < *cvětьje*

Other instances of palatalization are of morphological origin as when by analogy an ending with a back vowel is shifted to a soft stem.

**konъ > kon* because palatalization is lost in final position but *n'* is retained in *kon'ət* (the postpositive definite article). However, *kon'ət* does not originate from **konьtъ* but by generalizing *ət* from hard stems as *stolət < *stolъtъ*. Thus, **kon' + ət* before final *n'* was lost but *otec (< *otьcъ) + ət* gives *otecət*, not **otec'ət* which means that final *c'* was lost at an earlier date.

**zętъ (> *z'et') > zet* but plural is *zet'ove* with *-ove* from *ŭ*-stem.

vid'ə (d' instead of *žd) < *vidjǫ* where *'ə* is transferred from such forms as *lep'ə, mol'ə, men'ə < *lěpl'ǫ, *mol'ǫ, *měn'ǫ.*

(e) *š, ž, č, št, žd* and *c* (except in d (3)) dispalatalize.

(f) *t, d, s, z, l, n, r, c, p, b, m, v* can form palatalized-nonpalatalized pair.

Not only *vid'ə* but all former *i*-stem verbs have been restructured so that the expected reflexes of *jotation* have been eliminated: *plat'ə* (not *št*), *xod'ə* (not *žd*), *nos'ə* (not *š*), *voz'ə* (not *ž*), *ezd'ə* and *ezdene* (not *žd* as opposed to P *jeżdżę, jeżdżenie,* Ukr *jiždžu, vyjiždženyj*). However, *je ~ jo*-stem verbs usually retain the older alternations arising from *jotation: pišə < *pisjǫ, kažə < *kazjǫ, mažə < *mazjǫ,* but *šept'ə* (not *št < tj*). The expected alternations often turn up in imperfective forms like *viždam* (imperative of *vid'ə*), *plaštam* (imperative of *plat'ə*) or in such doublets as *puštam - puskam, drašt'ə - draskam, gložđə - glozgam* (although cognates indicate a root *glod-*, not *glozg* or *glozd*).

SLOVENE

1. The second palatalization

   k > *c*: **kě̯₁lъ* > *cêl*; **kvě̯₁tъ* > *cvệt*
   g > *z*: **gě̯₁lo* > *zelọ̑*; **gvě̯₁zda* > *zvẹ́zda*
   x > *s*: **xě̯₁rъ* > *sệr*

2. The third palatalization

   k > *c*: **ovъka* > *óvca*, **xolpъk-* > *hlâpec*
   g > *z*: **vitęg-* > *vîtez*
   x > *s*: **vъx-* > *vès*

3. *tl, dl* > *l*

   dl > *l*: **modliti* > *molíti*, **šidlo* > *šílo*
   tl > *l*: **metlъ* > *mèl*, **pletlъ* > *plèl*

   In these and similar verbs, the *d* or *t* of the root have been analogically reintroduced into the participles, thus, either *mèl* or *mẹ́təl*; *plèl* or *plẹ́təl* and also *pàl* or *pâdəl* < **padlъ*; *prèl* or *prẹ̑dəl* < **prêdlъ*. The feminine singular of these participles is *méla* or *métla*, *pléla* or *plétla*, *pála* or *pádla*, *prẹ́la* or *prẹ́dla*, etc. The insert vowel now appearing between the root and the *l*-participle (where no stem formant vowel occurred in PSl) is a general feature of Sln regardless of the nature of the consonant preceding the *l*, thus, *grîzəl* < **grizlъ*, *nẹ́səl* < **neslъ*, *pẹ́kəl* < **peklъ*, etc.

4. *ort-, olt-* > *rat-, lat-*

   **ŏrdlo* > *rálo* and **ôrkyta* > *rakîta*
   **ŏlkati* > *lákati* and **ôlkъtъ* > *lakât*

   Note that although the vowel resulting from metathesis is the same regardless of the intonation, the original state of affairs is usually still discernible on the basis of suprasegmental features.

5. The *tort*-formula

   **tort* > *trat*: **borda* > *bráda*, **vorna* > *vrána*
   **tolt* > *tlat*: **golva* > *gláva*, **golsъ* > *glâs*
   **tert* > *trět*: **bergъ* > *brẹ̑g*, **berza* > *brẹ́za*
   **telt* > *tlět*: **melko* > *mlẹ́ko*, **delto* > *dlẹ́to*

6. The reflexes of *ь̥*, *ъ̥* > *a* (when long), *ə* (when short)

   Orthographically *ə* is written *e*.

   **dь̥nъ* > *dân* vs **pъsъ* > *pès [pə̀s]*
   **mъ̥xъ* > *mâh* vs **sъnъ* > *sèn [sə̀n]*
   **lâkъtъ* > *lakât* vs **glădъkъ* > *gládek [gládək]*
   **lь̥nъ* > *lân* vs **tъmà* > *temà [təmà]*

It will be noticed that in this last example, the jer would normally be weak (cp. R *t'ma,* P *ćma*). In Sln, however, it is quite common for a "weak jer" to be retained in dissyllabic words. Further examples are:

*venę̂ < *vъně, stéblo < *stьblò, stezȁ < *stьz'a (e = [ə]* in *venę̂, stezȁ), táreš* or *trȅš < *tьrešь, žánješ < *žьn'ešь.*

jь- > i: **jьskra > ískra, *jьgla > îgla, *jьměti > imẹ́ti*
ȇj, ȇj > ij: **bьješь > bîješ, *velikъjь > *velikyjь > *velikȳ > vệliki*

In the last examples and in all similar adjectives *i < ȳ* is the result of contraction and was, therefore, long but all unstressed long vowels shorten (p. 314) and every *y > i.* However, the quality of the vowel from **ъjь* as in Cz (p. 232) tells us that *ъ̥* here was treated as *y*, not as *ъ̥* in other environments.

7. Reflex of *ktĭ, gtĭ, tj > č*

**noktь > nộč, *světja > svẹ́ča*

8. Reflex of *dj > j*

**medja > méja, *rъdja > rjȁ*

9. *stj, skj, sk* + FV > *šč*

**bъrstjь > bȑšč, *pustjenъ > puščȅn*

10. *zdj, zgj, zg* + FV > *žj* or sometimes simplified to *ž*

**rozgьje > rộžje, *dъzdjь > dȁž [dəš]* but *dəžjȁ < *dъzdja* (gen. sing.), **zagvozdjenъ > zagožȅn* and *zagozdèn*

11. Epenthetic *l* is retained

**zemja > zémlja, *kupjenъ > kúpljen, *drěmješь > drẹ́mlješ*

12. The *tъrt*-formula

**tъrt, *tьrt > tr̥t > tərt:* **sъmьrtь > smȑt [smə̀rt], *vьrxъ > vȓh [və̂rx], *gъrdlo > gŕlo [gə́rlo], *tъrgъ > tŕg [tə́rk]*
**tъlt, *tьlt > tolt [tou̯t]:* **stъlpъ > stȍlp [stou̯p], *xъlmъ > hȍlm, *žьltъ > žộlt, *pьlnъ > pọ́ln*

13. The *trъt*-formula

**trъt, *trьt > tr̥t > tərt:* **krъtъ > kȑt [kərt], *krъvavъ > krvâv [kərvâu̯]*
**tlъt, *tlьt > tolt [tou̯t]:* **glъtati > goltáti, *slьza > sólza, *jablъko > jábolko*

14. *y* and *i > i*

**byti > bíti, *biti > bíti, *synъ > sîn, *syrъ > sȉr*

15. *ž* > *r* between stressed *o* and *e*

**bože* > *bóre* (voc. of **bogъ*), **možetъ* > *móre*

The emphatic particle *že* > *re* > *r* regardless of environment: **kъtože* (> **ktore*) > *kdọ́r*, **kajьže* > *kȁr*

16. *l* > *u̯* / —— #, C (not indicated orthographically)

**bělъ* > *bẹ́l [bẽu̯]* vs **běla* > *bẹ́la*, **kadilьnica* > *kadîlnica [kadíu̯nica]*, **padlъ* > *pȁl [pȁu̯]* vs **padla* > *pála*, **neslъ* > *nẹ́səl [nésəu̯]* vs **nesla* > *nésla*, **bol'ьnikъ* > *bolník [bou̯ník]*, **xvalьca* > *hvâlca [xvau̯ca]*

17. *v* > *u̯* / —— #, C (not indicated orthographically)

**pavь* > *pâv [pâu̯]*, **pravьda* > *prâvda [prâu̯da]*, **vьdova* > *vdộva [u̯dộva]*

Between consonants or after *r* — *u̯* may become a full vowel: *odvzẹ́ti [ɔdu̯zẹ́ti* or *ɔduzẹ́ti]*, *mlâd vdóvec [mlâdudɔ́vəc]*, *bârv [baru̯* or *baru]* — gen. plural of *bârva; v* is a labiodental only before vowels and *j, l, r* as in *pr̂vi [pə̂rvi]*, *s krvjọ́ [skərvjọ́]*, *v róki [vrɔ́ki]*, *vlâk [vlâk]*.

18. The Proto-Slavic vowels *ě, ę, e, ǫ, o*

All the PSl mid vowels in Sln are reflected not only in long and short variants but can also occur as mid-high (to be indicated by means of *ẹ, ọ*) or mid-low (indicated by *e, o*) phonemes. That is, each one of the PSl *ě, ę, e, ǫ* and *o* can have four distinct reflexes in modern Sln, not all of which occur with equal frequency. These are the following:

(1) long mid-high *ẹ̄, ọ̄* (as in Grm *jẹder, rọt* or similar to Eng *a* in *ate* and *o* in *go* but without the diphthongal off-glides)
(2) long mid-low *ē, ō* (as in Eng *bạd, mọre* but longer)
(3) short mid-low *ĕ, ŏ* (same as in No. 2 but shorter)
(4) short mid-high *ẹ̆, ọ̆* (same as in No. 1 but short)

Reflexes in Nos. (1), (2) and (4) can occur only under stress whereas No. (3) occurs mainly in unstressed syllables or in a final stressed syllable. Reflexes in No. (4) are limited to final stressed syllables and then only when *ẹ* is followed by *j* (*imẹ̆j*) and *ọ* by *u̯* (*vọ̆u̯* < **volъ*). All the stressed vowels have (or rather had) a distinctive pitch. Reflexes in No. (1) can have either a long rising (—́) or long falling (—̂) pitch; reflexes in No. (2) can have only long rising, and in Nos. (3) and (4) have only short falling (—̀). In summary,

Type No.	*1*		*2*	*3*		*4*
PSl: ě, ę, e >	é̩	ê̩	é	ě̩	e	ę̈ + j
PSl: ǫ, o >	ó̩	ô̩	ó	ǒ̩	o	ǫ̈ + u̯
Stressed nonfinal	+	+	+	−	−	−
Stressed final	+	+	−	+	−	+
Unstressed	−	−	−	−	+	−

The standard orthography of Sln makes no allowance for all of these differing reflexes; *e* is the only symbol for all the reflexes of *ě, ę, e,* and *o* for all the reflexes of *ǫ, o*. Scholarly works, therefore, make use of the same system of diacritics as used in the above chart and described on pp. 30-1.

This is essentially the same system popularized by Pleteršnik in his famous dictionary (1894-5). One seemingly clumsy feature of Pleteršnik's system is that he used two subscripts (*ę, ę* and *ǫ, ǫ*) for each of the mid-high vowels even though these mark no difference in pronunciation in the literary language. However, Pleteršnik's intention was to help speakers of various dialects acquire a uniform, literary pronunciation. The literary norm for the pronunciation of the long mid vowels reflexes the actual developments in Gorenjsko (Upper Carniola) whereas the situation in Dolenjsko (Lower Carniola), the next major dialect, was quite different.

In this latter dialect **ě* > *ei̯* but **ę* and **e* > *i̯e* whereas **o* (with falling pitch and lengthened neo-acute) > *u* but the later lengthened **o* (in internal stressed syllables) and **ǫ* > *u̯o*.[49] Pleteršnik used *ę* and *ǫ* when these were pronounced respectively as *ei̯* and *u* in Dolenjsko; in the other instances he used *ę* and *ǫ*. Thus, by citing a form like *vę́ra* (where *ę́* < **ě*) Pleteršnik not only indicated the literary pronunciation but also informed Dolenjsko speakers that this *ę́* corresponds to *ei̯* in their dialect but *rêd* (where literary *ê* < **ę*) corresponds to *i̯e*. Similarly, citations like *nǫ̑č* (where literary *ǫ̑* < old **ō*) vs *mǫ́ka* (where *ǫ* < **ǫ*) or *kǫ́ža* (where *ǫ* < lengthened internally stressed *o*) allowed Dolenjsko speakers to associate the literary *ǫ* with both *u* (as in *nûč*) and *u̯o* (in *mu̯ǫ́ka, ku̯ǫ́ža*) in their own speech. There was no need for any similar diacritic device with the low-mid vowels, for here there exists a one-to-one correspondence; every Gorenjsko *é* or *ó* (literary norm) equaled Dolenjsko *i̯e* and *u̯o* respectively. Some scholarly works continue to cite forms in this older system without change. However, as stated, Pleteršnik devised his system with more than purely scholarly purpose in mind. Therefore, many reference works use a slightly modified system with only subscript — usually the dot under *e* or *o* to mark the higher type of mid vowel.

[49] All examples cited here deal with long vowels. Thus, *ě* > *ei̯* means only long *ě* > *ei̯*, not every Proto-Sln *ě*. Also the same notational system for mid vowels is used here as cited above. Thus, the *e* of *ei̯* indicates a low mid vowel, *ę* of *i̯ę* — a high mid vowel.

SUMMARY: **The origins of the Slovene mid vowels**

(The numbers refer to the historical processes described in Section 20.)

Mod. Sln	*PSl source*	*As a result of*
ê	ě, ę	unshifted ⁀; 4, 5
	e	3, 4, 5
ô	ǫ	unshifted ⁀; 4, 5
	o	3, 4, 5
é	ě, ę	2, 6, 8 & 9
	e	8 & 9 only
ó	ǫ	2, 6, 8 & 9
	o	8 & 9 only
é	e	11 only
ó	o	
ə	ъ, ь	
ȅ	e, ě, ę	2, 10 in final syllables only
ȍ	o, ǫ	where 8 does not apply
e	e, ě, ę	unstressed only—either were never stressed or lost stress by processes No.: 3, 6 or 11, 7
o	o, ǫ	
ə	ъ, ь	

19. Overall palatalization of consonants

In all probability Sln never experienced any type of overall palatalization by front vowels. If such a thing ever did take place, it was lost without trace and at a fairly early date. A palatalized-nonpalatalized contrast continued to exist only with *l*, *r* and *n*, and even then the sources of *l'*, *r'* and *n'* were very limited.

(1) from PSl *l'*, *r'*, *n'* < **lj*, **rj*, **nj*:

**korljь* > *králj*, **morje* > *morjȇ*, **konjь* > *kònj*

(2) from epenthetic *l*: **zemja* > *zémlja*, **kupjenъ* > *kúpljen*

(3) from *l*, *r*, *n* + weak jer + *j*:

**zelьje* > *zélje*, **perьje* > *pérje*, **tьrnьje* > *trnje*

In modern Sln every *l'*, *r'*, *n'* > *l*, *r*, *n* in final position but elsewhere they became a sequence of two phonemes, that is, *l'* > *l* + *j*, *r'* > *r* + *j* and *n'* > *n* + *j*.

These facts are somewhat obscured not only by Sln orthography in which the formerly soft *l, r, n* are still written *lj, rj, nj* but also by the traditional notation for expressing linguistic change. Thus, we usually write **konjь > kònj* or **pȍlje > poljȇ* simply because *kònj, poljȇ* are the present Sln spellings, but this is potentially misleading. More accurate would be **konjь > *kȍn' > kȍn* or **pȍlje > *pol'ȇ > poljȇ*. To complicate matters Sln orthography retains the digraphs *lj* and *nj* wherever *l'* and *n'* used to exist but *rj* only before vowels, that is, *králj* (where *l' > l*), *kraljer* (where *l' > lj*) but *pastír (r < r')* vs *pastírja*. This is merely a reflection of the fact that *r' > r* in final position much earlier than *l' > l* or *n' > n* before the orthography became established. The *l' > l* is, however, later than *l > ų*; therefore, the spelling *lj* at least marks the retension of *l* as in *králj* vs **žȁl = žȁų*.

20. The prosodic features of Slovene

The prosodic system of Late PSl underwent several far reaching and complicated developments before it finally evolved into that now existing in modern Sln. Many of these developments, however, have been discussed elsewhere; we need, therefore, only to mention them in summary form and in chronological order. A starred form in final place in any given formula indicates that the example cited is subject to further change. (See footnote 50).

(1) THE SHORTENING OF ALL VOWELS BEARING ACUTE PITCH

**kőrva > *krȃva > *kràva, *sǫsĕdъ > *sōsȅdъ, *kožűxъ > *kožùxъ*

This short rising intonation merges with the short rising that existed previously on the short vowels bearing fixed stress as in **zakònъ, *večèr'a* (type-*a*). This process occurs not only in SC but everywhere in Slavic where intonational or qualitative differences are recoverable. Cz and perhaps UL are the only exceptions.

(2) THE EMERGENCE OF NEO-ACUTE PRODUCING A LONG RISING PITCH ON LONG VOWELS AND SHORT RISING ON SHORT VOWELS

**kl'učь > *kl'účъ, *grěxь > *grȇxъ, *junakь > *junákъ, *bobь > *bòbъ, *pьsь > *pȍsъ, *kon'ь > *kòn'ъ*

Only in the case of genitive plurals do we have evidence of neo-acute lengthening of an originally short vowel, that is, in modern Sln *kònj*, nominative singular **kòn'ъ < *konjь* vs genitive plural **kón'ъ < *kónjь* where it would seem that identical conditions gave rise to two different intonational solutions. The lengthening in the genitive plurals is obviously morphologically conditioned.

(3) ALL SHORT VOWELS WITH CIRCUMFLEX PITCH LENGTHEN

**dȇnъ (> *dȃn > *dân) > dân, *slȏvo > *slôvo, *nȍžь > *nôž, *mȅdъ > *mêd*

This new long falling intonation now merges completely with the long falling that had continued to exist with long circumflex vowels. That is, *ô* in *nôs* (from a short vowel) in no way differed from *ô* in *môž* < **mǫ̂žъ* where the vowel had always been long with falling pitch.[50] Length in a closed syllable is very likely the result of compensatory lengthening. Regarding the suggested length of an originally short vowel as in **slôvo, *nôsa, *mêdu,* etc., see pp. 216.

(4) THE FIRST PROGRESSIVE STRESS SHIFT

Every vowel with long falling pitch shifted its stress to a following syllable. The vowel receiving this new stress lengthened and acquired falling pitch. The originally long falling and the originally short falling, lengthened by process No 3, both undergo this progressive shift in the same way.

**mę̑so* > *mesô, *mę̑sto* > *mestǫ̑, *slôvo* > *slovǫ̑, *lâkъtъ* > **lâkət* > **lakât* > *lakât, *mêdu* > *medû* (gen. sing. of **mêd* < **mèdъ*), **dâru* > *darû* (gen. sing. of *dâr* < **dârъ*), **nôsa* > *nosâ* (gen. sing. of **nôs* < **nȍsъ*), **mǫ̂ža* > *možâ* (gen. sing. of **môž* < **mǫ̂žъ*), **ǫ̑glь* > **ôgl* > **ôgəl* > **ogâl* (now *vogâl*), **gȍlǫbъ* > **gôlob* > **golôb, *nâ rǫkǫ* > **na rôko*[51]

Present forms like *mę̑d, dâr* (nom. sing.) vs *medû, darû* (gen. sing.) prove that this progressive shift was later than the loss of the jers. Otherwise there would be forms like **medə̂* or **medâ* < **medъ̂* < **mêdъ*. Similarly in *vogâl* there was hardly any need for an insert vowel between the two final consonants of **ǫ̑glь* until the final *ъ* was lost.

(5) THE RISE OF NEO-CIRCUMFLEX

Some time after the first progressive stress shift from all vowels with circumflex intonation, a new series of circumflex intonations came into existence, hence, the name "neo-circumflex". These newly circumflexed vowels were in no way affected by the shift which affected vowels with the old or original circumflex. In every other way, however, these two circumflexes are identical in that all vowels bearing this pitch are long and falling and undergo identical developments in the future.

The reasons for this new wave of circumflexions are only vaguely understood, and the whole problem is one of the most vexing in all the phonological history of Sln.

(6) THE FIRST REGRESSIVE STRESS SHIFT

A stressed short vowel in a final syllable shifts its stress to a preceding

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[50] For the sake of historical accuracy, the use of the dot under *e* and *o* in *nǫ̑s, mę̑d, golǫ̑b* etc., has been omitted in this and other sections until process No. 9 (p. 314) when the narrow mid vowels come into existence.

[51] The present forms are *mǫ̑ž, golǫ̑b, na rǫ̑ko* with a narrow *o*. See previous footnote.

long vowel. The long vowel receiving this stress acquires a rising pitch merging with that originating from the neo-acute.

**krīlò (< *krīdlò) > krílo, *trēstì (< *trę̄stì) > *trēsti, *vr̥̀bà > vŕba, *trāvà > tráva, *trōbà (< *trǭbà) >*tróba, *glāvà > gláva, *dūšà > dúša*

The same shift occurs also in a closed final syllable as in **zākòn > zákon* but, of course, *zākǫ́na* (gen. sing.) undergoes no shift because *ò* is not in a final syllable; similarly, **sōsèd(< *sǫsědъ) > *sósed, *nāròd > národ,* etc. show the expected shift in the nominative singular because the stressed short vowel was in a final syllable but not in the oblique cases where the addition of an ending makes the stressed syllable no longer final. It must also be emphasized that no stress shift occurs from any final long syllable. That is, **mesô* or **golôb* (long by process No. 4); *junák, učeník* (long by neo-acute); **goró* (long by contraction **gorojǫ̀*, instr. sing.) all retain their original stress.

It will be remembered that all the inherently long vowels *(i, y, u, ě, ę, ǫ, a)* of Late PSl tended to remain redundantly long in prestressed position (see pp.208-10).This means that the only forms left unaffected by this regressive shift were of the type **sestrà, *konàc (< *konьcь), *neslì, *ostrotà, *potòk, *vretenò, *məglà, *stəblò* in which the prestressed vowel was originally short. As in W Sl, Sln does not preserve prestressed length in words having type-*c* stress. Thus, in such forms as the nominative singular **rǒkà < *rǭkà, *pětà < *pę̄tà* the root vowels had shortened as in Cz *ruka, pata,* Slk *ruka, päta* and P *ręka, pięta* but as opposed to the SC *rúka < *rūkà, péta < *pētà.* Therefore, Sln forms like **rokà, *petà* did not participate in this stress shift but were treated exactly like **nogà* or **sestrà* where the prestressed vowel had never been long. We are, therefore, faced with exactly the same problems as discussed when examining the various conditions and factors determining the preservation of prestressed length.

(7) THE SHORTENING OF ALL NONSTRESSED LONG VOWELS

**lîpō (< *lipojǫ̀) > lîpo, *stârā (< *staraja) > stâra, *dêlāš (< *dělaješь) > dêlaš, *mêsēc (< *měsę̄cь) > mę̂sec*

This was the last prosodic development to be shared by all dialects of Sln.

(8) SHORT NONFINAL STRESSED VOWELS LENGTHEN

Until this point in the prosodic history of Sln, the only stressed short vowels were those which had born the old acute intonation in Late PSl but had been shortened by process No. (1), thus merging with the old short acutes as in **večèr'a, *naròda* (gen. of *národ*), **malìna.* Now, all such vowels lengthen; the formerly short rising pitch on these vowels also lengthens and merges with the long rising originating from neo-acute. Only vowels in a final syllable — both open and closed — were exempt from this lengthening. By this time in the development of Sln many final consonantal clusters, which

arose because of the loss of weak jers, had been restructured by the insertion of *ə* before the final member of the cluster. For example, **sedmъ* > **sedm* > *sẹ́dəm, *neslъ* > **nesl* > *nẹ́səl*; in these and similar forms the stressed vowel is no longer in a final syllable and thus subject to the very same lengthening as in any other internal syllable.

Now, with the emergence of forms like *kráva, rodína, úlica, véra*, etc. we have returned to the PSl state of affairs whereby the old acute vowels are again long with a rising pitch. Only in examples such as **kmèt, *kožùh* or **məglà* is there no lengthening because the stressed vowel is in a final syllable. Also there is no evidence of final lengthening in words of the type **sósed, zákon, národ* but for a different reason. That is, by process No. 6 all such final vowels had lost their stress to a preceding long vowel but the nonfinal stressed vowel (not subject to the stress shift described in No. 6) will now lengthen as in the example **sosèda* > **soséda* (gen. of **sósed*).

Some other examples are:

**brèza* > **bréza, *malìna* > *malína, *kòža* > **kóža, *nòsiš* > **nósiš, *nosìti* > *nosíti, *sedèti* > **sedéti, *jùtro* > *jútro, *blàto* > *bláto, *stàro* > *stáro* vs **stȁr* (no lengthening in a final syllable), **vètər* > **vétər, *bràti* > *bráti*

Note that after this process and the previous one, all unstressed vowels are short and all stressed ones have been lengthened except when final. Therefore, a long vs short contrast is from now on possible only in a final syllable, for example, *brȃt* 'take' — supine vs *brȁt* 'brother', *psí* (instr. plural) vs *psȋ* (nom. plural) or *stəzá* (gen. plural) vs *stəzȁ* (nom. sing.).

Process No. 8 began in the SW and spread gradually northward and westward until it engulfed all of Slovenia except Pannonia (the far NE). Vowels subject to this process were, thus, lengthened at different times in different places, and this contributed greatly to dialectal divisions since the specific development of a long vowel often depends on the length of time it has been in this category.

(9) ALL LONG MID VOWELS BECOME RAISED

This process brings into existence two qualitatively distinct types of mid vowels — a high vs low, a feature unique to Sln among Slavic languages. Until this time the short stressed *è* of **kmèt* (nom.) or the unstressed *e* of **sósed* differs from long stressed *é* of **kméta* or **soséda* (gen.) only on the basis of short vs long (*ĕ* vs *ē*). From now on they differ qualitatively as well, that is, *ĕ* vs *ę̄*. Unstressed *e, o* or short stressed *è, ò* (in final syllables only) remained low-mid vowels.

This process raised not only the vowels lengthened by process No. 8 as in **bréza* > *bréza, *kóža* > *kóža, *nósiš* > *nósiš, *sedéti* > *sedéti, *vétər* > *vétər* but also these mid vowels which were lengthened long before by process No. 3 as in **mèdъ* > **mêd* > *mẹ̑d, *nòsъ* > **nôs* > *nọ̑s* or by process No.

4, as, for example, **mę̑so* > **mesô* > *mesǫ̑*, **pȍlje* > **poljê* > *poljẹ̑*, **gȍlǫbъ* > **golôb* > *golǫ̑b*.

Raising of long mid vowels is closely connected with that of their diphthongization to be described in No. 13.

(10) THE SHORT RISING INTONATION BECOMES SHORT FALLING

Because of process No. 8 at this period, short rising pitch could exist only in final syllables. It now becomes short falling:

**kmèt* > *kmȅt*, **bràt* > *brȁt*, **məglà* > *məglȁ*, **kožùh* > **kožȕh*, **potòk* > **potȍk*

The notation used here and also by some Slovene scholars differs from that usually employed in Slovene handbooks in which $\grave{\ }$, not $\overline{\ }$ = short falling.

(11) THE SECOND REGRESSIVE STRESS SHIFT

A stressed short vowel in final position shifts its stress to any preceding short vowel except *ə* < *ъ*, *ь*. These newly stressed vowels are lengthened and acquire rising pitch. However, as we have just seen, the short mid vowels were lower than their long counterparts. Therefore, any newly lengthened mid vowel became a long mid-low vowel (No. 2) since it was a short mid-low before the stress shift occurred. In the case of any other vowel, this newly established rising pitch merges completely with that rising pitch already in existence (due to processes No. 2, 5, 7). Note also that by the time of this shift, short unstressed *o* and *o* < *ǫ* had merged completely as had *e*, *e* < *ě* and *e* < *ę*. Therefore, the origin of the newly stressed *o* or *e* plays no role in the nature of the reflex.

Some examples are: **gorà* > *góra*, **ženà* > *žéna*, **potȍk* > *pòtok*, **kožȕh* > *kóžuh*, **nestì* > *nésti* but not in *stəzȁ*, *dəžjȁ* (gen. of *dȁž*) because of *ə*. Neither is there any retraction from any long vowel such as *junák* (by process No. 2), *mesǫ̑* (by process No. 4) or *gorǫ́* < **gorojǫ* (length by contraction).

Since this stress retraction gives rise to a long rising pitch on the newly stressed *e* and *o*, these low mid vowels normally do not occur with any other intonation. The few existing examples of *ê* or *ô* are all of analogical origin.

This stress shift resembles that described in No. 6 but differs from it in that during the earlier one stress was retracted only to a long vowel whereas in the latter one stress is retracted only to short *e* or *o*. This again brings us the problem of defining the precise conditions under which prestressed length is preserved. Thus, the presence of a long mid-low vowel in *róka* < **rǫ̑kà* (< **rǫka*) proves that *o* was lengthened by the second regressive shift as opposed to the long mid-high *ǫ́* in *trǫ́ba* < **trōbà* (< **trǭbà*) which was already long when the first regressive shift occurred. However, with *í* in *zíma* (< **zimà*) or *í* in *širína* (< **širinà*) there is no way to determine whether the *í* is due to the first or second regressive stress shift. If the prestressed *i* had

preserved its length from PSl times, then it received its stress and pitch by the first regressive shift. If, on the other hand, *i* had lost its prestressed length, it will not be stressed and relengthened with rising pitch until the second regressive shift. The SC *zíma* < **zīmà* vs *širìna* < **šīrīnà* may indicate that Sln *zíma* belongs to the first category and *širína* to the second. However, there is no proof of this because Sln often loses prestressed length (as do Cz, Slk and P) in nouns of type-*c* stress whereas SC retains it.

This vowel shift also produced dialectal divisions in Sln. Some peripheral areas, largely in the N and NW, do not have it at all. Others, for example W Carinthea and W Pannonia have the shift but without even lengthening the newly stressed vowel, indicating its relatively recent appearance in these areas.

(12) THE LOSS OF DISTINCTIVE INTONATIONS OR PITCH

This development is not characteristic for Upper Carniola whose prosodic features usually form the literary norm. All the central and NW dialects retain distinctive pitch whereas it is lost in the NE and SW. As a concessions to speakers from these latter areas, it was decided after World War II to drop pitch distinctions as an obligatory feature of literary speech. As a result of this decision, the system of diacritics needed in textbooks could be simplified.

The loss of intonations led to some increase in the number of homonyms. For example, *gorȇ* (nom. plural) vs *gorẹ́* (gen. sing.) now merge as do such forms as *pọ́t* 'way' vs *pȏt* 'sweat', etc., but the vowels remain both long and high, only the falling vs rising is lost. This loss does not, therefore, lead to any change in quality or quantity. The long vs short still remains in such examples as *brât* vs *brȁt*.

OTHER PROSODIC DEVELOPMENTS

The twelve processes outlined above and the order given, adequately explain all the data observed in Upper Carniola (the literary norm), but we shall now describe several other phenomena not incorporated into this norm, for they constitute in total a perfect example of the intricacies possible in the development of a prosodic system, and the interplay in time and space of all factors is also a perfect example of how dialects are formed. For ease of reference, we shall continue the same numbering as above.

(13) THE DIPHTHONGIZATION OF LONG MID VOWELS

This development by no means occurred as late as its placing in the list of prosodic features would indicate, but it is not certain whether it ever took place in Upper Carniola, the object of our attention in describing the prosodic history of literary Sln. Diphthongization, however, is a salient feature in the prosodic history of the language as a whole and essential in any understanding of the dialect divisions of Sln. Chronologically the first wave of diphthongization must go back to a very early period, possibly before process No. 6, but definitely after the one described in No. 1 and before No. 8.

It first affected long **ĕ*, that is, **ĕ* which had never lost its length (in prestressed position or with unshifted circumflex) or was lengthened at an early date (by processes No. 2, 4, 5 or 6) whereas the old acute **ĕ* (shortened by process No. 1) is not subject to any such tendency until it is relengthened (by process No. 8). This old long **ĕ* gives *je* in the N and W but *ei̯* in the S and E. At approximately the same time but perhaps somewhat later **ô* (long by processes No. 3, 4, 5) also diphthongizes. Wherever **ĕ* > *je*, there **ô* > *u̯o* but where **ĕ* > *ei̯* there **ô* > *ou̯*. The **je* — *u̯o*-type of diphthong occurs in those areas of Sln which tended to retain nasal vowels whereas the presence of *ei̯* — *ou̯* indicates an early loss of nasality. Once the former nasals became oral mid vowels, they were subject to the very same processes as all the other mid vowels, namely, to raising (No. 9) and/or diphthongization. The resulting diphthongs may also undergo further changes such as dissimilation: *u̯o* > *u̯ə; ei̯* > *ai̯, ou̯* > *au̯*, or monophthongization: *u̯o* > *u, iẹ* > *i, ou̯* > *ọ* or *u*, etc.

It is now generally believed that Upper Carniola is just such an area where *ei̯* > *ẹ* and *ou̯* > *ọ*. Thus, *ẹ́* of *grẹ́h* and *vẹ́ra* are now identical in the literary standard as are *ọ* of both *nọ̑č* and *nọ́si,* but they arrived at this point by different routes: *ẹ́* of *grẹ́h* (*ĕ* long by process No. 2) and *ô* (long by process No. 3) were at one time diphthongs but not *ẹ́, ọ́* of *vẹ́ra* or *nọ́si* (*ĕ, o* lengthened later by process No. 8) and then raised (by process No. 9). It is, however, not impossible that in both these latter examples *é, ó* may also have diphthongized after lengthening, thus, merging with the older *ei̯, ou̯* all of which later give *ẹ* and *ọ*, but this is less likely. On the other hand, it is more likely the *ệ* of *mệd* (*ê* by process No. 3) could have diphthongized and merged with *ei̯* < *ĕ* since *ê* here is a very early lengthening as opposed to *ẹ́* of *sẹ́dəm* (by process No. 8), a later lengthening.

(14) THE INTERACTION OF LENGTH, RAISING AND DIPHTHONGIZATION

Any mid vowel may be subject to one or both of the last two processes as soon as it becomes long. Therefore, vowels never shortened or lengthened at an early date have been subject to these processes for a longer time than those lengthened by later developments. The reflex of a vowel with old length is, therefore, much more likely to be a high monophthong or diphthong than is the reflex of a vowel with later length. As established, these lengthenings occurred in three chronological waves. They are: (1) The early lengths: unshifted ¯, prestressed length (preserved by process No. 6) and those due to processes No. 2, 3, 4, 5 and 6; (2) The lengthening produced by process No. 8; (3) The lengthening produced by process No. 11. The nasal vowels also undergo all these lengthenings but are not subject to either raising or diphthongization until after nasality is lost.

Let us illustrate these principles with some concrete examples from Lower Carniola which proceeded in the following stages:

(a) **gǫ̑ba* > **gǫ̀ba* by process No. 1 vs **zǫ̑b* > **zǫ̑b* (with ◌̂ unchanged)

(b) **nǒčъ* > **nôč* by process No. 3 vs **nòsitъ* > **nòsi* (◌̀ remains short)

(c) **nôč* > **noɥč* (early raising and diphthongization) > *nûč* (later) but not in **zǫ̑b* either because ǫ was still a nasal (as in the NW and N) or because it was still a much lower vowel than *ô*.

(d) **gòba, *nòsi* > *góba, nósi* by process No. 8.

(e) *góba, nósi* > *gɥǫba, nɥǫsi* and also **zôb* > *zɥǫ̑b* whereby *ô* is treated as a newly lengthened mid vowel even though the length is old.

(f) **gorà* (> *gòra* > *góra*) > *guǫra* by process No. 11. The same will occur with *o* < ǫ. The stages *gòra, góra* are not attested in Lower Carniola but are elsewhere.

Note that stages (c), (e) and (f) are so to speak repeated performances of the same tendency, a reoccurring pattern encountered throughout the entire Slovene area, but there is no way to predict the direction of change after a vowel is lengthened. Theoretically it could remain unchanged or it could be either raised or diphthongized. If the latter, then there is no way to predict the nature of the diphthong — *ɥo* or *oɥ*? For example, as shown in stage (e), *ó* > *ɥǫ* in Lower Carniola; but in S Styria, just to the east, *ó* > *oɥ* which merged with older *oɥ* < *ô* (stage 3) > *aɥ*. However, further north and west in Upper Carniola and Carinthia *ó* > *ǫ́*. The fact that in both of these latter regions *ǫ́* has progressed no further than merely raising would indicate that stage (e) here is of a more recent date than where diphthongization had time to occur. The Upper Carniolan *ǫ́* can later merge with *ǫ́* < *oɥ* < *ô* (stage *c*) but this was not possible in Carinthia where *ô* > *ɥǫ, uə* or *u*. In these latter dialects further to the north, in Austria, where nasal vowels were retained for much longer, such mergers as in stage *e* are not expected. The reflexes of the long nasals in this region, regardless of the time of their lengthening, remain in the vast majority of instances monophthongs of the low mid type. Thus, in the Zilja Valley we find *nûəč, nǫ́si* but *zôb, góba.* The long vowels of *nǫ́si* and *góba* indicate that both were lengthened in stage *e*, but the first was raised as expected for a long mid vowel. The latter was either not raised (or diphthongized) because it was still a nasal, or was in fact raised from an ever lower nonnasal vowel. In like manner, dialectologists investigate the entire Slovene area. In every region, one must establish: (a) the reflex of *ō* resulting from each successive wave of lengthening; (b) the point at which new *ō* < *ǭ* becomes subject to the same rules as etymological *ō*; (c) the mergers, if any, among these reflexes.

The same considerations apply as well to the investigation of the front series of mid vowels, only here there is an additional complication. One must determine not only the reflexes of one front but two nonnasals, namely of

both *e* and *ě* as well as the later entry of new *ē* < *ę* into the game. Therefore, the potential for mergers is even greater and much more complicated than in the back series. For example, old long *ě* (either as *ei̯* or *ie*) could conceivably merge with either *ê* (< *e* lengthened by processes No. 3, 4), with *e* or *ě* (lengthened later by process No. 8) or with all three or with any two, or with none. If with none, the remaining three can also undergo mergers in any combination, and this is even without considering the reflexes of *e* < *ę* or the lengthening caused by process No. 11. Finally, it must be mentioned that for almost half of Slovenia, the reflex for lengthened *ъ, ь* is not *a* as in the standard language but either *ę* (NE corner) or *e* (N and NW), thus adding yet another player to the game.

There is, however, a definite symmetry in the behavior of both the back and front vowels of the same height. For example, if *ó* > *u̯o* by process No. 8, then *é* > *i̯e*; but where *ó* > *o̯u̯*, there *é* > *ei̯*, or where *ó* > *ǫ́*, there *é* > *ę́*, and so on. If during process No. 11 *o* > *u̯o*, then *e* > *i̯e*. If *u̯o* dissimilates to *u̯ə*, then *i̯e* > *iə* or where *ou̯* > *au*, there *ei̯* > *ai̯*.

(15) LATER STRESS SHIFTS

The following are not incorporated into the literary norms but clearly illustrate the role of prosodic features in creating dialectal divisions:

(a) *The shift of stress from a final short vowel to ə* < *ъ, ь:* This includes forms like *məglà* or *təmə̀n* > *mə̀gla, tə̀mən*. This is an extension of process No. 11 whereby stress was retracted to short *e* or *o* but not *ə*. The later shift takes in all of Sln except Upper and Lower Carniola, the western end of Carinthia and the Rezija Valley. In Styria the newly stressed *ə* lengthens to *ę̄* or *i̯e*; elsewhere this vowel usually remains short.

(b) *The shift of stress from a long final circumflex to the preceding syllable:* This takes in forms like *okǫ̑* > *òko* or *golȏ̯b* > *gòlob*. Note that this is the direct reverse of process No. 4 and, interestingly enough, occurs in three completely separate islands. The largest of these covers NW Styria and E Carinthia; the next largest is in the western fringe of Carinthia (Zilja) and the adjacent Rezija region, immediately to the south. Finally, there is an isolated patch in the central west (around Poljane, just to the west of Ljubljana).

This shift exhibits a great deal of local variation in two major features. In some areas, the retraction occurs only from an open syllable; in others, from both open and closed syllables. The newly stressed vowel develops quite differently from area to area.

(c) *The shift from an internal long acute to the following syllable:* This shift is even more geographically limited than the one just described; it is found in only two separate regions both of which are smaller than any with **okǫ̑* > **òko*. One is an oblong area just to the west of Klagenfurt, Austria, stretching southward toward the Drava R. The other is along the upper Soča R. and adjacent region in Italy. In the latter we find *bráta* > *bratà, dúša* >

dušă, tráva > *travȁ*, etc. In the first area, however, the same forms occur with a double stress, that is, *bráta* > *bràtȁ, dúša* > *dùšȁ*. For some speakers, the former long acute vowel retains its length and the following vowel receives a secondary stress.

SUMMARY: **Prosodic developments of Slovene**

(1) Long rising shortens (◌̋ > ◌̀). This ◌̀ merges with ◌̀ in such forms as **večèr'a, *kǫ̀kòlъ, *nāròdъ* with type-*a* stress fixed on short noninitial vowel.

(2) Neo-acute arises giving ◌́ on long vowels but ◌̀ on short (*e, o, ъ, ь*) as in **junakъ* > **junák* vs **nožь* > **nòž*. This ◌̀ merges with ◌̀ from process No. 1.

(3) Short falling lengthens (◌̏ > ◌̂): **nòs* > **nôs, *mèd* > **mêd, *dȅn* (*ə* < *ь*) > **dân* (now *dân*). This ◌̂ merges with older ◌̂ as in **môž* (*o* < *ǫ*), *dâr, dûh*.

(4) Every ◌̂ (both original and new) shifts one syllable forward, the vowel receiving this stress is also long falling: **mêso* > **mesô*.

(5) New ◌̂ arises for both phonetic and morphological reasons. This new ◌̂ merges with existing ◌̂ of all origins (**nôs, *dâr* or **mesô*) but never shifts as older ◌̂ (see No. 4).

(6) Stress shifts from a short final to a preceding long: **trāvȁ* > *tráva, *nāròd* > *národ, *sōsèd* > **sósed*. This ◌́ merges with ◌́ from process No. 2.

(7) Unstressed long vowels shorten.

(8) ◌̀ (from processes No. 1 and 2) > ◌́ except in a final syllable. This ◌́ merges with ◌́ from processes No. 2, 6.

(9) Long (rising or falling) mid vowels of all origins are raised.

(10) ◌̀ > ◌̋ which because of process No. 8 can exist only in final syllables.

(11) Final ◌̋ shifts to a preceding short *e* or *o* of any origin, and *e, o* > *é, ó*.

(12) Loss of distinctive intonations: *â, á* > *ā, à* > *ă*.

(13-4) Diphthongization of long mid vowels at various times in various areas. The earliest is after process No. 1 but before process No. 8 (perhaps long before): *ě* (by processes No. 2, 5, 6, old ◌̂) > *e̯i* or *je* and *ô* (by processes No. 3, 4) > *o̯u* or *uo*, thereafter possible after every lengthening and/or raising.

(15) Later stress shifts of three types: (a) *məglȁ* > *mə̀gla*; (b) *okǫ̂* > *òko*; (c) *kráva* > *kravȁ* or *kràvȁ*.

SUMMARY: **The origin of intonations (excluding No. 15)**

(a) ◌̂: unshifted old ◌̂, by processes No. 3, 4, 5; contraction V̀jV > V̂ (**zā̀jęcь* > *zȇc*).

(b) ◌́: by processes No. 2, 6, 8, 11; contraction VjV̀ > V́ (**bojā̀lъ sę* > *bál se*).

(c) ◌̋: by process No. 11 (final syllables only). Remember that many Slovene reference works use ◌̀ to mark this intonation.

Examples with acute pitch

(The numbers refer to the various processes)

Proto-Slavic	*1*	*6*	*7*	*8*	*9*	*10*	*11*	*Modern Sln*
krā́va	kràva			kráva				kráva
kožū́xъ	kožùx						kóžux	kóžuh
kožū́xa	kožùxa			kožúxa				kožúha
rā́kъ	ràk					rȁk		rȁk
rā́ka	ràka			ráka				ráka
sǫsḗdъ	sōsèd	sósed			sǫ́sed			sǫ́sed
sǫsḗda	sōsèda		sosèda	soséda	sosẹ́da			sosẹ́da
večèr'a				večér'a	večẹ́r'a			večẹ́rja
zākònъ		zákon						zákon
zākòna			zakòna	zakóna	zakọ́na			zakọ́na

Examples with neo-acute

Proto-Slavic	*2*	*6*			*9*	*10*	*11*	*Modern Sln*
junakъ̀	junák							junák
bobъ̀	bòb					bȍb		bȍb
bobȧ							bóba	bóba
kọtъ̀	kót				kọ́t			kọ́t
kǭtȧ		kóta			kọ́ta			kọ́ta
gorъ̀ *(gen. plural)*	gór				gọ́r			gọ́r

Examples with circumflex pitch

Proto-Slavic	*3*	*4*			*9*			*Modern Sln*
mę̂so		mesô			mesǫ̂			mesǫ̂
slôvo	slôvo	slovô			slovǫ̂			slovǫ̂
mǫ̂žъ					mǫ̂ž			mǫ̂ž
mǫ̂ža		možâ						možâ

Neo-circumflex pitch develops exactly as above except that it is not subject to process No. 4, apparently because it came into existence later or because it merged with the old circumflex after process No. 4 took place.

MACEDONIAN

1. The second palatalization

k > *c:*	**junaki₂* > *junaci*, **kě₂lъ* > *cel*
g > *z:*	**vorgi₂* > *vrazi*
x > *s:*	**uspěxi₂* > *uspesi*, **xě₂dъ* > *sed*
kv > *cv:*	**kvě₂tъ* > *cvet* and *cut*
gv > *dzv:*	**gvě₂zda* > *dzvezda* (*d* here is secondary)

2. The third palatalization

k > *c:*	**ovьka* > *ovca*
g > *z:*	**vitęg-* > *vitez*
x > *s:*	**vьx-* > *(vs-)* now *sa, si+ot, te; se+ta, to*

3. *tl, dl* > *l*

**gъrdlo* > *grlo*, **modlitva* > *molitva*
**pletlъ* > *plel*

4. **ort-, *olt* > *rat, lat*

**ŏrdlo* > *ralo*, **ôrvьno* > *ramno* (< **ravno*)
**ŏlkomъ* > *lakom*, **ôlkъtь* > *lakot*

5. The *tort*-formula

**tort* > *trat:*	**borda* > *brada*
**tolt* > *tlat:*	**golva* > *glava*
**tert* > *trět:*	**bergъ* > *breg*
**telt* > *tlět:*	**pelnъ* > *plen*

6. The reflexes of *ь̥, ъ̥*

ь̥ > *e:*	**otьcь* > *otec*, **věnьcь* > *venec*
ъ̥ > *o:*	**sъnъ* > *son*, **soldъkъ* > *sladok*
jь > *i:*	**jьgra* > *igra*, **jьgla* > *igla*
ьj, ъj > *ij:*	**šьja* > *šija*, **pьješь* > *pieš*

7. *ktĭ, gtĭ, tj* > *ќ*

**noktь* > *noќ*, **vętje* > *veќe*, **světja* > *sveќa*

8. *dj* > *ǵ*

**medja* > *meǵa*, **rъdja* > *'rǵa*[52]

9. *stj, skj, sk* + FV > *št*

**gordiskjo* > *gradište*, **skedrъ* > *štedar*

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[52] *r̥* in initial position > *ər* and this is written *'r*.

10. *zdj, zgj, zg* + FV > *žd*

**dъzdjь > dožd*

11. Epenthetic *l* is lost at morpheme boundaries

**zemja* (> **zeml'a*) > *zemja, *korabjь* (> **korablь*) > *korab*

12. The *tъrt-* and *trъt*-formulae

**tъrt, *tьrt, *trъt, *trьt > tr̥t*
**gъrdlo > grlo, *krъvь > krv, *pьrvъ > prv*
**tvьrdo > tvrdo, *krьstъ > krst, *krъtъ > krt*
**xrьbьtъ* (> **xrbet*) > *'rbet*[53]

13. The *tъlt-* and *tьlt*-formulae

**tъlt, *tьlt, *tlъt, *tlьt > tolt*
**stъlbъ > stolb, *pьlnъ > poln*
**jablъko > jabolko, *slьza > solza*

14. *y* and *i* > *i*

**sinъ > sin*
**synъ > sin*

15. The nasals

ǫ > *a:*	**mǫka > maka, *rǫka > raka*
ę > *e:*	**čęsto > često, *męso > meso*
ja	in initial position: **językъ > jazik, *jęčьmenь > jačmen*

16. The reflexes of *ě*

ě > *e:*	**lěto > leto, *sněgъ > sneg*

17. Loss of *x*

x > *v*	in final position and after *u:* **straxъ > strav, *orěxъ > orev, *muxa > muva*
x > *ø*	elsewhere: **xlěbъ > leb, *xubavъ > ubav, *strěxa > strea, *troxa > troa, *prěxodъ > preod*

x remains in borrowings and as an archaism in native words such as *xram, xranitel, xemija*

18. Palatalization of consonants

(1) There is no overall palatalization by front vowels.

(2) Only *l* and *n* form palatalized-nonpalatalized pairs.

(a) *n'* (written *ињ*) < PSl *n'* < *nj* and from *n* + weak jer + *j: kon'* < **konjь* and *molen'e* < **modl'enьje*

[53] See footnote 52.

(b) *lj* (used to transliterate *љ*) is often referred to as soft or palatalized, but this is misleading. The symbol *љ* actually represents the so-called neutral or European *l* (as in French *belle* or Eng *leap, lung*) and is, therefore, quite different phonetically from the sound represented by *љ* in Sr. This neutral *l* contrasts with a so-called hard *l* (written *л*) which is articulated as a "dark" or velarized *l* as in Eng *bell, call, tall*, etc. Therefore, the opposition *lj* vs *l* is not really a palatalized-nonpalatalized contrast in the traditional sense as used in Slavic. *lj* is "palatalized" only in the sense that it is without velarization; therefore, more of the tongue is closer to the palate during its articulation but there is little or no true palatalization.

The hard or velarized *l* can originate from either PSl *l* or *l'* (< *lj*) and occurs in the following environments: (1) in final position; (2) before a back vowel; (3) before another consonant except *j*.

**ljudьje* > *luǵe* merging with *l* in *lupi* < **lupiti*
**prьjateljь* > *prijatel* merging with *l* in *orel* < **orьlъ*

Only forms containing the root *ljub-* 'love' retain its original softness (more accurately does not velarize) in M, for example, **l'ubъvь* > *ljubov (љубов)* as opposed to **kl'učь* > *kluč (кључ-* cp. Sr *љубав* and *кључ).*

The "neutral *l*" also arises from both PSl *l* and *l'* (< *lj*) but occurs only when these were followed by a front vowel or by *j*. Since the occurrence of this "neutral *l*" is perfectly predictable in these situations, M orthography does not use the symbol *љ* here but simply writes *л*.

Thus *l* in *pole* and *leto* both merge phonetically in spite of the fact that in the first example *l* is from PSl *l'* (< *lj*) and in the second — *l* originates from *l* + a front vowel *(lěto)*. The same is true of *l* in *len* < **lьnъ* and *l* in *zelje* < **zelьje*. The examples just cited are written *поле, лето, лен* and *зеље,* that is, with *л*, not with *љ* as would be expected if the orthography were more purely phonetic.[54]

The symbol *љ* is used only in those situations where "neutral *l*" is not predictable, that is, in final position or before a back vowel. This occurs rarely and is limited largely to foreign borrowings and to the one Slavic root (*l'ub-*) already mentioned. Thus, we have the oft cited *bela* ('white' — fem. sing.) vs *belja* ('grief, woe' — from Turkish) — orthographically *бела* vs *беља*. However, the contrast here is not the traditional hard-soft but hard- (with velarization) -neutral.

[54] Note the difference in Serbian where we have *поље* vs *лето* and *лан* vs *зеље*.

19. The cluster *čr*

The sequence *čr* arose basically from two sources: (1) *tort*-formula forms of the *čert*-type; (2) *tъrt*-formula forms of the *čъrt*-type. In the majority of instances in the literary language, *čr* > *cr* as in SC and is very likely the result of Sr influence, for the *cr*-forms are concentrated in the N and Central M. However, in the south and western fringe of M, *čr* > *čer* and some of these have been incorporated into the standard language.

**červo* (> **črěvo*) > *crevo; *čerpъ* (> **črěpъ*) > *crep* and *čerep;*[55] **čerša* or **čeršьn'a* (> **črěša, *črěšn'a*) > *creša, crešna* and *čereša; *čьrta* (> **čr̥ta*) > *crta; *čьrnъ* (> **čr̥nъ*) > *crn; *čьrvь* (> **čr̥vь*) > *crv*

20. Prosodic features

(1) There is no distinctive quantity.
(2) There is no distinctive pitch.
(3) Stress is fixed on the third last syllable.

SERBO-CROATIAN

1. The second palatalization

k > *c:* **kě₂na* > *céna, *vojьniki₂* > *vojníci*
g > *z:* **na nogě₂* > *nòzi, *vôrgi₂* > *vrâzi*
x > *s:* **snъxě₂* > *snàsi, *xě₂dъjь* > *sêdī*
kv > *cv:* **kvě₂tъ* > *cvêt*
gv > *zv:* **gvě₂zda* > *zvézda*

2. The third palatalization

k > *c:* **ovьka* > *óvca, *otьk-* > *òtac*
g > *z:* **vitęg-* > *vîtēz, *sъtęgati* > *stézati*
x > *s:* **vьx-* (> **vas*) > *sâv*

3. *tl, dl* > *l*

**modlitva* > *mòlitva, *mydlo* > *mîlo*
**pletla* > *pléla, *metla* > *mèla*

4. *ort-, olt-* > *rat-, lat-*

**ŏrdlo* > *ràlo* and **ôrkyta* > *ràkita*
**ôlkъtь* > *lâkat* and **ŏlkomъ* > *làkom*

[55] The modern language makes a semantic distinction between these forms; *crep* means "tile" or "clay pot" but *čerep* — "skull" or "shell" as on a turtle, clam, etc.

5. The *tort*-formula

**tort > trat: *borda > bráda, *vorna > vràna*
**tolt > tlat: *golva > gláva, *golsъ > glâs*
**tert > trět: *bergъ > brêg, *berza > brèza*
**telt > tlět: *melko > mléko, *delto > dléto*

6. The reflexes of *ъ, ь > ă*

**dъnъ > dân, *pьsъ > pàs, *starъcь > stàrac*
**lъžь > lâž, *rъžь > ràž, *ôlkъtь > lâkat*

Serbo-Croatian in many instances vocalized weak jers under conditions which remain as yet not fully defined. The latest and most authoritative formulation suggests:[56]

(1) *ъ, ь* with neo-acute intonation in initial syllables:

**tъrešь > tàrēš, *žьn'ešь > žànjēš* (verbs of type-*c* stress)
**mъn'ьjь > mànjī* (neo-acute before a *jotated* consonant)

(2) after *l* and *m* in initial syllables:

**lъgati > làgati, *mъgla > màgla*

(3) *ъ, ь* vocalize to prevent a consonant cluster of three or four members in initial syllables. Only fricative + stop + liquid (e.g. *skl*) was permitted to arise:

**cvьsti > cvàsti, *stьblo > stáblo, *snъxa > snàha*

Forms like **dъždža > dàžda* or **čьsti > čăsti* are also supported analogically by the normative **dьždžь, *čьstь* where *ъ, ь* would normally vocalize.

*jь- > i: *jьskra > ìskra, *jьgla > ìgla, *jьgrati > ìgrati*
*ьj, ъj > ij: *šьja > šĭja, *pьješь > pĭjēš*

The clearest and most numerous examples of the tense jers occurs in the masculine singular of the so-called definite adjectives: **dobrъjь > *dobrȳ > dòbrī, *žьltъjь > *žьltȳ > žûtī*. As in Cz (p. 232), P, Slk and Sln, the fact that *ī* results from **ъjь* indicates the quality of *ъ* before contraction. Further support is found in the masculine nominative plural of the same adjectives, as in **dobriji > dòbrī, *žьltъjь > žûtī* where **iji* merges with **ъjь* indicating that *ъ + j* develops as *i* or *y* (since SC *i* and *y* merge), not as *ъ* elsewhere.[57]

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[56] P. Ivić, "O uslovima za čuvanje i ispadanje poluglasa u srpskoxrvatskom" *Xenia Slavic*, Mouton: The Hague, 1975, pp. 61-73.

[57] An interesting example of *ъ + j* is found in the developments of the root **zmъj-* attested in two forms throughout S Sl: **zmъjь* > SC, Sln *zmâj*, and Blg, M *zmej*; **zmъja* > SC *zmìja*, Sln *zmíja*, Blg and M *zmija*. In the first set of forms, *ь* for reasons unknown develops as *ъ* in other environment; in the second set, as expected with tense *ь*.

7. Reflexes of *ktĭ, gtĭ, tj* > *ć* (Cyrillic *ћ*)

**pekti* > *pèći, *noktь* > *nôć*
**mogti* > *mòći*
**světja* > *svéća*

8. Reflexes of *dj* > *đ* (Cyrillic *ђ*)

**medja* > *mèđa, *rъdja* > *rđa*

9. Reflexes of *stj, skj, sk* + FV > *št, šć*

**jьskješь* > *ištēš, *dъskica* > *štîca, *krъstjenьje* > *krštēnje* and **krščēnje, *skitъ* > *štît, *čistjenьje* > *čišćēnje*

Examples with *šć* are analogical restructurings occurring where *st* or *sk* still existed in other forms of the same root. On the model of forms like *plátiti ~ plâćen* < **platjenъ* where *t* > *ć* is the normal reflex, the same alternation was introduced into a form like *čìstiti ~ čìšćēnje,* that is, *st ~ šć* instead of *st ~ št.*

10. *zdj, zgj, zg* + FV > *žd, žđ*

**dъzdjь* > *dâžd, *mozgina* > *mòždina* but **gnězdjenьje* > *gnéžđēnje*

žđ replaces *žd* in the same forms and for the same reasons as *šć* replaces *št.*

11. Epenthetic *l* is retained

**zemja* > *zèmlja, *kupjenъ* > *kûpljen, *sypješь* > *sîpljēš*

12. The *tъrt-* and *trъt*-formulae

**tъrt, *tъrt, *trъt, *trъt* > *tr̥t:*

**sъmьrtь* > *smr̂t, *vьrxъ* > *vr̂h, *vьrba* > *vŕba*
**gъrdlo* > *gr̂lo, *tъrgъ* > *tr̂g, *kъrčьma* > *kŕčma*
**krъvavъ* > *kr̂vāv, *krъtъ* > *kr̂t, *krъstъ* > *kr̂st*
**grъměti* > *gŕmeti*

13. The *tъlt-* and *tlъt*-formulae

**tъlt, *tъlt, *tlъt, *tlьt* > **tl̥t* > *tut:*

**stъlpъ* > *stûp, *xъlmъ* > *hûm, *žьltъ* > *žût*
**sъlnьce* > *sûnce, *vьlga* > *vûga, *pьlnъ* > *pûn*
**plъtъ* > *pût, *slъza* > *sùza, *blъxa* > *bùha*
**klьnešь* > *kùnēš*

14. *y* and *i* > *i*

**byti* > *bîti, *biti* > *bîti, *synъ* > *sîn, *sinьjь* > *sînjī*

15. *l* > *o* in final position

**žalъ* > *žȁo*, **bělъ* > *bȅo* but **běla* > *béla*, **stolъ* > **stȍo* > *stô* but **stola* > *stòla*, **umьrlъ* > *ùmro*, **zъlъva* > *zȁova*

16. Secondary jotation

The loss of weak jers brought about many new clusters of which *j* was the final member. In most such cases, there occurred a repeat of what had happened in PSl with the sequences C + *j*.

**prǫtьje* > *prûće* with *ć* as in *svéća* < **svetja*
**gladьjǫ* > *glâđu* with *đ* as in *mèđa* < **medja*
**l'ubъvьjǫ* > *ljúbavlju*, **sъdravьje* > *zdrâvlje* with new epenthetic *l*
**listьje* > *lȉšće*, **kostьjǫ* > *kôšću*, **gvozdьje* > *gvôžđe*. Note new *stj, zdj* > *šć, žđ*, not *št, žd*.
**pytanьje* > *pítānje* with *nj* as in *kȍnj* < **kon'ь* (*n'* < *nj*)
**solьjǫ* > *sȍlju* with *lj* as in *pȍlje* < **pol'e* (*l'* < *lj*) but *sьj, zьj, rьj* > *sj, zj, rj* (not *š, ž, r'*)
**klasьje* > *klâsje* as opposed to *š* in *prȍšen* < **prosjenъ*

17. The nasals

ǫ > *ǔ:* **pǫtь* > *pût*, **zǫbъ* > *zûb*, **ženǫ* > *žènu*, **ǫtroba* > *ùtroba*
ę > *ě:* **čędo* > *čȅdo*, **rędъ* > *rêd*, **ramę* > *rȁme*

18. The reflexes of *ě*

There are three basic dialectal groups of reflexes for *ě*, each of which is named according to how *ě* developed in that particular region. For example, No. (1) is known as *ekavian* because *ě* > *e* in that area.

ě > (1) *ě:* in the *ekavian* dialects
(2) *je* (when short), *ije* (when long) } in *jekavian* dialects
(3) *ĭ* in the *ikavian* dialects

No. (3) has no literary status and, therefore, need not concern us here, but both the others do. In ordinary usage *ekavian* is obligatory when writing in Cyrillic (Serbian) and *jekavian* when writing in Latin script (Croatian).

Ekavian	*Jekavian*	*Origin*
*brěgъ > брȇг	brȉjeg	*stressed length*
*běda > бéда	bijèda	*formerly prestressed length*
*děvica > дȅвица	djèvica	*formerly prestressed brevity*
*věra > вȅра	vjȅra	*stressed brevity*

19. Palatalization of consonants

(1) There is no overall palatalization by front vowels.
(2) Only *l* and *n* form palatalized-nonpalatalized pairs.
(3) *l'* and *n'* originate from:

(a) Proto-Slavic *l', n' < lj, nj*

*pȍlje < *pol'e < *polje*
*kȍnj < *kon'ъ < *konjъ*

(b) epenthetic *l'*

*zèmlja < *zemja, kûpljen < *kupjenъ*

(c) *l', n'* from secondary *jotation*

*sȍlju < *solьjǫ, zdrâvlje < *sъdravьje*
*pítānje < *pytanьje*

20. The cluster *čr- > cr-*

The sequence *čr* in Proto- or Early SC arose from two sources:

(1) *tort*-formula forms of the *čert*-type
(2) *tъrt*-formula forms of the *čьrt*-type

The total number of roots involved is understandably not large but very characteristic for the Štokavian dialects of SC.

**červo* (> **črěvo*) > *crévo; *čerpъ* (> **črěpъ*) > *crêp*
**čьrnъ* (> **čr̥nъ*) > *crn; *čьrvь* (> **čr̥vь*) > *crv*

21. *vъ-, vъ- > u-*

**vьdovьcь > udóvac; *vъnukъ > ùnuk*
**vъšь > ûš* and *vâš*

These changes bring about the merger of the prepositions *vъ* and *u* and also the prefixes *vъ-* and *u-*.

22. The prosodic features of Serbo-Croatian

PITCH: four distinctive pitches exist and occur only under stress:
— short falling: *krȁva, brȁt, kȍnj*
— long falling: *mêso, grâd, glâvu, rôd*
— short rising: *màlina, žèna*
— long rising: *gláva, národ*

STRESS: free and mobile stress still exists with the restriction that a final syllable cannot be stressed.

QUANTITY: vowel length is still distinctive and can exist in both stressed and unstressed syllables. In stressed position, length is marked either — or — (depending on the pitch); in unstressed position, with —. Thus, in *žénā*

(gen. plural) both *e* and *a* are long, but the symbol ˊ indicates both length and stress.

THE MAIN STAGES IN THE PROSODIC HISTORY OF SERBO-CROATIAN

For the sake of clarity, we will use the same diacritics as employed elsewhere in this textbook while pointing out that SC reference works usually mark long neo-acute with ˜, not ˊ as in our system. All dialects undergo processes No. 1 - 3. Neo-circumflex in the standard language occurs only in the genitive plural but in some northern dialects, neo-circumflex has a much broader scope as in Sln. Compensatory lengthening (No. 4) occurs everywhere but the scope and results may differ. Processes 7*a* - *b* are limited to the so-called Štokavian dialects but even here there is great variety. Stress retraction may be restricted in one way or another.

(1) Long acute vowels shorten so that these merge with the short acute.

**rákъ* > **ràkъ, *kráva* > **kràva, *nāròdъ* > **nāròdъ*

(2) Neo-acute gives long rising on long vowels and short rising on short vowels.

**kolačь* > **koláč, *kl'učь* > **kljúč*
**bobь* > **bòbъ, *konjь* > **kònъ*

(3) Long circumflex remains long in forms under two syllables but shortens elsewhere merging with short circumflexes.

**sŷnъ* > *sîn* but **sŷnove* > *sȋnovi* with the same pitch as in *dȁsku* < **dъ̑skǫ* (acc. of *dàska*)

(4) Loss of weak jers brings about compensatory lengthening:

(a) of short falling vowels: **ròdъ* > *rôd* but *ròda*
(b) of unstressed vowels: **kàmenъ* > **kàmēn, *klòpotъ* > **klòpōt, *làkomьcь* > **làkomac* but **làkomьca* > **làkōmca*
(c) stressed acute, before *r, n, m, l, j* + C:
**stàrьcь* > **stàrac* but **stàrьca* > **stárca, *pràvьda* > **právda*
(d) sometimes before the same consonants in final stressed position:
**kràjь* > **kráj*

(5) All short rising intonations (from processes No. 1, 2) become falling, thus, merging with the short circumflexes.

**ràk* > *rȁk* as *sȋnovi* < **sŷnove*
**bòb* > *bȍb* as *ròda*

(6) All long rising intonations (processes No. 2, 4 *c, d*) become falling merging with the old circumflex (process No. 3) and lengthened short falling (No. 4 *a*)

**kljúč* > *kljûč* as in *rûku* < **rǫ̂kǫ*

**koláč* > **kolâč* as in *grâd* < **gôrdъ*
**kráj* > *krâj, *právda* > *prâvda*

This process eliminated the long rising pitch in the vast majority of Štokavian dialects but it remained in most of Čakavian, Kajkavian and also the Slavonian dialects of Štokavian. This retension causes notational difficulties if any of the above mentioned areas undergoes a stress shift as in 7 *b* resulting in a new type of rising pitch that does not merge with the older one still in existence. In such instances, as in Slavonian, the older type of rising pitch that is neo-acute is indicated by ˜́ (*kut*); the newer with ˊ (*rúka* < **rūkā*). For Čakavian or Kajkavian dialects having only the older rising pitch, usage differs. Traditionally most reference works have used ˊ, but SC specialists prefer ˜́.

(7) Retraction of stress one syllable back brings into existence rising pitches. Notice that if stress is retracted from a long vowel, this vowel remains long but without any pitch distinction.

(a) If stress is retracted to a short vowel, this vowel acquires a short rising pitch:

**kolâč* > *kòlāč, *malìna* > *màlina*

(b) If stress is retracted to a long vowel, it acquires a long rising pitch:

**nārȍd* > *národ, *rūkā* > *rúka*

SUMMARY: Origin of the Serbo-Croatian intonations:

ˆ (1) long circumflex in form under two syllables: *sîn, sîna* but *sȉnovi* < **sŷnъ, *sŷna, *sŷnove.*

(2) former neo-acute: *kljûč* < **kl'úč* < **kl'učь.*

(3) compensatory lengthening:

(a) of short falling: *rôd* < **ròdъ, nôs* < **nȍsъ*

(b) of old shortened acute before *r, n, m, l, j* + C: *stârca* < **stárca* < **stàrьca, prâvda* < **právda* < **pràvьda*

(c) as in *ь* in final syllable but not consistently: *krâj* < **kráj* < **kràjь* but *stàr* < **stàrъ*

(4) contraction when first vowel is stressed: *pâs* < **pȍjasъ*

ˋ (1) shortened long acute: *rȁk* < **ràk* < **rákъ*

(2) shortened long circumflex in forms over two syllables: *sȉnovi* < **sŷnove*

(3) former short circumflex: *ròda* < **ròda*

(4) neo-acute of *e, o, ь, ъ: bȍb* < **bobь, pȁs* < **pьsь*

—́ stress retraction to a long vowel: *národ* < **nārȍdъ, rúka* < **rūkȁ*

—̀ stress retraction to a short vowel: *màlina* < **malʹìna*

A note on literary Serbo-Croatian. Although this textbook cannot possibly deal with the history of the Slavic literary languages, a few words are necessary about the origin of modern standard literary SC. It is the only example in the Slavic world of two distinctly separate ethnic groups sharing the same literary language as the result of a treaty. This agreement or treaty is known as the *knjȉževnī dȍgovōr* and was signed in Vienna in 1850 by most of the leading literary figures of the day, both Serbian and Croatian. It was agreed that both groups would use the same dialect for all literary and scholarly purposes. The dialect was a *Jekavian* variant of Štokavian as spoken in East Hercegovina. It had been codified and propagated by the famous Vuk Karadžić and was in essence his own dialect. It was a prudent choice in the sense that it was the largest single dialect spoken by Serbs and Croats alike as well as by Moslems. This choice was thus a compromise in that it did not represent the speech of any staunchly Serbian or Croatian region. Karadžić had always argued that a literary language must be based on a truly living dialect rather than on an artificial mixture from diverse dialects. The signatories of the Vienna Agreement fully endorsed this principle.

Originally it was intended that two alphabets could be used for this new literary language, but that both Serbs and Croatian would write in *Jekavian*. The practice of writing Serbian in *Ekavian* came about later. Thus, in his translation of the New Testament, Karadžić wrote *вјера, дјевојка, гријех, пријеч*, etc. in their *Jekavic* form. Nowadays, however, if anyone were to write SC in Cyrillic (and Cyrillic would be the natural choice of anybody considering himself a Serb), he would automatically write *вера, девојка, грех* or *реч* etc. in *Ekavic* even if the writer's own dialect were *Jekavic*. Conversely, a Croatian will normally write his language in Lat script and this obliges him to spell *vjera, djevojka, grijeh, riječ* etc. in *Jekavic* even if his own dialect is *Ekavic* or *Ikavic*.

Only textbooks like the present one or reference works in general intended for use outside the Serbo-Croatian area deviate from this norm. Here it is customary to cite SC examples in Lat script (Croatian orthography), but more often than not in *Ekavian*, thus, *vȅra, dȅvojka, grêh, rêč*.

Comparison of Basic Vocabulary

COMMONLY USED ADJECTIVES

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
bělъ(jь)	бѣлъ	білий	белый	белы	бял	бел	бѐо
cělъ(jь)	цѣлъ	цілий	целый	цэлы	цял	цел	цѐо
čistъ(jь)	чистъ	чистий	чистый	чысты	чист	чист	чи̏ст
čьrnъ(jь)	чрьнъ	чорний	черный	чорны	черен	црн	цр̏н
čьrvenъ(jь)	чрьвенъ	червоний	—	чырвоны	червен	црвен	цр̏вен
dьlgъ(jь)	дльгъ	довгий	долгий	доўгі	дълъг	долг	дӯг
dobrъ(jь)	добръ	добрий	добрый	добры	добър	добар	до̀бар
gorьkъ(jь)	горькъ	гіркий	горький	горкі	горък	горок	го́рак
kyslъ(jь)	кыслъ	кислий	кислый	кіслы	кисел	кисел	ки̏сео
krasьnъ(jь)	красьнъ	красний	красный	красны	красен	красен	кра́сан
l'ubъ(jь)	любъ	любий	люб	любы	либе (ім.)	љуба (ім.)	љу́ба (ім.)
malъ(jь)	малъ	малий	малый	малы	малък	мал	ма̀о
mękъkъ(jь)	мѧкъкъ	м'який	мягкий	мяккі	мек	мек	мѐк
moldъ(jь)	млѡдъ	молодий	молодой	малады	млад	млад	мла̂д
pьlnъ(jь)	плънъ	повний	полный	поўны	пълен	полн	пӯн
sъdorvъ(jь)	съдравъ	здоровий	здоровый	здаровы	здрав	здрав	здра̀в
slabъ(jь)	слабъ	слабий	слабый	слабы	слаб	слаб	сла̀б
starъ(jь)	старъ	старий	старый	стары	стар	стар	ста̀р
tjudjь(jь)	штоѹждь	чужий	чужой	чужы	чужд	туѓ	тӯђ
velikъ(jь)	великъ	великий	великий	вялікі	велик	велик	вѐлик
zelenъ(jь)	зеленъ	зелений	зеленый	зялёны	зелен	зелен	зѐлен
zъlъ(jь)	зълъ	злий	злой	злы	зъл	зол	зла̀о
živъ(jь)	живъ	живий	живой	жывы	жив	жив	жи̏в
žьltъ(jь)	жлътъ	жовтий	жёлтый	жоўты	жълт	жолт	жӯт

(Adapted from: O. S. Mel'nyčuk, ed. (1966). *Vstup do porivnjal'no-istoryčnogo vyvčennja slovjans'kyx mov.* Kiev: Naukova Dumka)

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
bẹ́l	biały	bílý	biely	běły	běły	b'olě
cẹ́l	cały	celý	celý	cyły	cely	c'ol
čìst	czysty	čistý	čistý	čisty	cysty	caistě
čŕn	czarny	černý	čierny	čorny	carny	corně
čŕljèn	czerwony	červený	červený	čerwjeny	cerwjeny	carveně
dọ̑lg	długi	dlouhý	dlhý	dołhi	dłujki	dåud'ě
dọ́ber	dobry	dobrý	dobrý	dobry	dobry	dübrě
górek	gorzki	hořký	horký	hórki	gorki	d'ört'ě
kísel	kisły	kyselý	kyslý	kisały	kisały	—
krásen	krasny	krásný	krásny	krasny	kšasny	krosně
ljûb	luby	líbý	l'úby	luby	luby	l'aibě
mâli	mały	malý	malý	mały	mały	molě
mehâk	miękki	měkký	mäkký	mjehki	měki	mąt'ě
mlâd	młody	mladý	mladý	młody	młody	mlådě
pọ̑ln	pełny	plný	plný	połny	połny	påun(ě)
zdràv	zdrowy	zdravý	zdravý	strowy	strowy	—
slȁb	słaby	slabý	slabý	słaby	słaby	slobě
stȁr	stary	starý	starý	stary	stary	storě
tûj	cudzy	cizí	cudzi	cuzy	cuzy	caudzě
vélik	wielki	veliký	veliký	wulki	wjeliki	vilt'ě
zelèn	zielony	zelený	zelený	zeleny	zeleny	—
zȅl	zły	zlý	zlý	zły	zły	—
žîv	żywy	živý	živý	żiwy	żywy	zaivě
žọ̑lt	żółty	žlutý	žltý	żołty	żołty	—

COMMON ANIMALS AND BIRDS

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
(j)agnę	агнѧ	ягня	ягненок	ягня	агне	јагне	ја̀гње
(j)aje	аıце	яйце	яйцо	яйцо	яйце	јајце	ја́је
bobrъ	--	бобер	бобр	бабёр	бобър	—	да̏бар
bъčela	бъчела	бджола	пчела	пчала	пчела	пчела	(п)чѐла
bykъ	бъıкъ	бик	бык	бык	бик	бик	би̏к
čьrvь	чрьвь	черв'як	червь	чарвяк	червей	црвец	цр̂в
(j)elenь	ıелень	олень	олень	алень	елен	елен	јѐлѐн
(j)esetrъ	—	осетер	осётр	асетр	есетра	есетра	јѐсетра
gǫsь	гѫсь	гуска	гусь	гусь	гъска	гуска	гу̏ска
ježь	ıежь	їжак	ёж	вожык	еж	еж	је̂ж
kobyla	кобъıла	кобила	кобыла	кабыла	кобила	кобила	ко̀била
konь	конь	кінь	конь	конь	кон	коњ	ко̀њ
korva	крава	корова	корова	карова	крава	крава	кра̏ва
koza	коѯа	коза	коза	каза	коза	коза	ко̀за
kurъ	куръ	(кур)	(кур)	курыца	кур	—	—
medvědь	медвѣдь	ведмідь	медведь	мядзведзь	—	—	мѐдвед
morvi	мравıй	мураха	муравей	мурашка	мравка	мрава	мра̏в
olbǫdь	лебедь	лебідь	лебедь	лебедзь	лебед	лебед	ла̏бу̏д
orъlъ	орьлъ	орел	орел	арол	орел	орел	о̀рао
osa	оса	оса	оса	аса	оса	оса	о̀са
ovьca	овьца	вівця	овца	авечка	овца	овца	о́вца
ǫgor'	—	вугор	угорь	вугор	—	—	у̏гор
pьsъ	пьсъ	пес	пес	пёс	пес	пес	па̏с
porsę	прасѧ	порося	поросе-нок	парася	прасе	прасе	пра̂се
ryba	рыба	риба	рыба	рыба	риба	риба	ри̏ба
skotъ	скотъ	скот	скот	скаціна	скот	—	ско̀т
svinьja	свинıа	свиня	свинья	свіння	свиня	свиња	сви́ња
s(v)orka	(сврака)	сорока	сорока	сарока	сврака	—	сврâка
telę	тельць	теля	теленок	целя	теле	теле	тѐле
turъ	тоуръ	тур	тур	тур	тур	тур	ту̏р
veprь	вепрь	вепр	вепрь	вяпрук	вепър	вепар	ве̏пар

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
jágne	jagnię	jehně	jahňa	jehnjo	jagnje	jognąˌ
jájce	jajo	vejce	vajce	jejo	jajo	joji
bǫ̑ber	bóbr	bobr	bobor	bobr	bobr	—
čebȇla	pszczoła	včela	včela	pčoła	(p)coła	celə
bȉk	byk	býk	býk	byk	byk	—
čȓv	czerw	červ	červ	červ	cerw	carv
jélen	jeleń	jelen	jeleň	jeleń	jeleń	—
jesȇter	jesiotr	jeseter	jeseter	jasotr	jesotr	—
gǫ̑s	gęś	husa	hus	hus	gus	gǫs
jȇž	jeż	ježek	jež	jěž	jež	jiz
kobíla	kobyła	kobyla	kobyla	kobła	kobyła	t'übålə
kȍnj	koń	kůň	kôň	kóń	koń	t'ün
kráva	krowa	kráva	krava	kruwa	krowa	korvo
kóza	koza	koza	koza	koza	koza	t'özə
kȕr	kur	kur	kura	kura	kura	t'aurą
médved	niedźwiedź	medvěd	medved'	mjedwjédź	mjadwjeź	—
mrávlja	mrówka	mravenec	mravec	mrowja	mroja	morvi
labǫ́d	łabędź	labut'	labut'	—	—	—
órel	orzeł	orel	orol	worjoł	jerjeł	vüŕål
ósa	osa	osa	osa	wosa	wosa	våso
óvca	owca	ovce	ovca	wowca	wojca	vüćə
ogór	węgorz	úhoř	úhor	wuhor	wugoŕ	vǫd'ör
pȇs	pies	pes	pes	pos	pjas	ṕås
prasȇ	prosię	prase	prasa	proso	prose	porsą
ríba	ryba	ryba	ryba	ryba	ryba	råi̯bo
skȍt	skot	skot	—	skót	skot	st'öt
svínja	świnia	sviňe	sviňa	swinja	swinja	svai̯ńə
sráka	sroka	straka	straka	sroka	sroka	svorko
téle	cielę	tele	tel'a	ćelo	śele	t'ilą
tȗr	tur	tur	tur	tur	tur	täur
vȇper	wieprz	vepř	vepor	wjapř	japś	vipər

COMMON ANIMALS AND BIRDS (cont'd)

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
vьlkъ	влькъ	вовк	волк	воўк	вълк	волк	вȕк
volъ	волъ	віл	вол	вол	вол	вол	вȏ
vorna	врана	ворона	ворона	варона	врана	врана	врȁна
žerbьcь	жрѣбьць	жеребець	жеребец	жарабец	жребец	ждребец	ждрéбац
zmьja	зми	змія	змея	змяя	змия	змија	змȉја
zvěrь	звѣрь	звір	зверь	звер	звяр	звер	звȇр

COMMON PLANTS

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
(j)abolnь	ꙗблонь	яблуня	яблоня	яблыня	ябълка	яболк-ница	јȁбука
agoda	агода	ягода	ягода	ягада	ягода	јагода	јȁгода
berza	брѣза	береза	береза	бяроза	бреза	бреза	брёза
bobъ	—	біб	боб	боб	боб	боб	бо̀б
bukъ	—	бук	бук	бук	бук	бук(а)	бȕк(ва)
bъzъ	—	боз	—	—	бъз	боз	бáза
čerš/ьna	—	черешня	черешня	чарэшня	череша	цреша	crẽšnja
čes-nъ/o/kъ	—	часник	чеснок	часнок	чесън	чесен	чѐсно
dervo	дрѣво	дерево	дерево	дзерава	дърво	дрво	дрȗво
dǫbъ	дѫбъ	дуб	дуб	дуб	дъб	даб	дȗб
(j)ęčьmy	—	ячмінь	ячмень	ячмень	ечмик	јачмен	јẽчмēн
edlь/a	—	ялина	ель	елка	ела	ела	јéла
(j)elьxa	ѥльха	вільха	ольха	вольха	елха	—	јóва
grab(r)ъ	—	граб	граб	граб	габър	габер	грȁб
gruša	—	груша	груша	груша	круша	круша	крȕшка
klenъ	—	клен	клен	клён	клен	клен	клȇн
korgъ	—	кріп	укроп	кроп	копър	копар	кȍпар
květъ	цвѣтъ	цвіт	цвет	цвет	цвят	цвет	цвȇт
lěsъ	лѣсъ	ліс	лес	лес	—	—	лȇс
lipa	—	липа	липа	ліпа	липа	липа	лȉпа

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
vǫ̑lk	wilk	vlk	vlk	wjelk	wjelk	våuk
vòl	wół	vůl	vôl	woł	woł	vål
vrána	wrona	vrána	vrana	wróna	vron	vorno
žrebę̑	źrebiec	hřebec	žrebec	žrěbc	žrěbc	zribəc
zmíja	żmija	zmije	zmija	zmija	zmija	—
zvę̑r	zwierz	zvěř	zver	zwěrjo	zwěrje	—

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
jáblan	jabłoń	jabloň	jabloň	jabłoń	jabłoń	joblün
jágoda	jagoda	jahoda	jahoda	jahoda	jagoda	jod'aidâi
bréza	brzoza	bříza	breza	brěza	brjaza	brezə
bȍb	bób	bob	bôb	bob	bob	büb
búkev	buk	buk	buk	buk	buk	bauk
bȅz	bez	bez	baza	bóz	baz	bǫ́z
črẽšnja	trześnia	střešně	čerešňa	třěšeń	—	—
češnják	czosnek	česnek	cesnak	—	—	—
drevô	drzewo	dřevo	drevo	drjewo	drjewo	/drâvə/
dǫ̑b	dąb	dub	dub	dub	dub	dǫb
jéčmen	jęczmień	ječmen	jačmeň	ječmjeń	jacmjeń	jącmen
jẽla	jodła	jedle	jedl'a	jědla	jedła	jadlă
jélša	olcha	olše	jelša	wólša	wolša	—
g(r)âber	grab	habr	hrab	hrab	grab	grobe
grûška	gruszka	hruška	hruška	krušej	kšuška	grausâi
klẽn	klon	klen	klen	klon	klon	—
kóper	koper	kopr	kôpor	koprik	kopr	—
cvę̑t	kwiat	květ	kvet	kwět	kwět	ḱot
lês	las	les	les	lěs	lěs	l'os
lípa	lipa	lípa	lipa	lipa	lipa	leipo

COMMON PLANTS (cont'd)

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
lьnъ	—	льон	лен	лён	лен	лен	лâн
malina	—	малина	малина	маліна	малина	малина	мàлина
orěxъ	—	(г)оріх	орех	арэх	орех	орев	òрах
ovьsъ	—	овес	овес	авёс	овес	овес	òвас
proso	просо	просо	просо	проса	просо	просо	прòсо
pьšenica	пьшеница	пшениця	пшеница	пшаніца	пшеница	пшеница	пшѐница
rъžь	—	—	рожь	—	ръж	'рж	рâж
sliva	—	слива	слива	сліва	слива	слива	шљи̏ва
sme/ьrk	—	смерека	смерч	смерч	смрека	смрека	смрѐка
trava	трава	трава	трава	трава	трева	трева	тра́ва
vьrba	врьба	верба	верба	вярба	върба	врба	вр̀ба
želǫdь	желѧдь	жолудь	желудь	жолуд	желъд	—	жѐлӯд
žito	жито	жито	—	жыта	жито	жито	жи̏то

COMMONLY USED VERBS

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
běgti/ (běžati)	бѣжати	бігати	бежать	бегчы	бягам	бега	бѐжати
biti	бити	бити	бить	біць	бия	бие	би̏ти
boléti	болѣти	боліти	болеть	балець	боли	боли	бо̀љети?
byti	быти	бути	быть	быць	съм	сум	би̏ти
česati	чесати	чесати	чесать	часаць	чеша	чеша	чѐсати
čuti	чоути	чути	чуять	чуць	чуя	чуе	чу̏ти
dati	дати	дати	дать	даць	дам	дам	да̀ти
dьržati	дрьжати	держати	держать	дзяржаць	държа	држи	др̀жати
(j)ěxati	ѣхати	їхати	ехать	ехаць	яхам	јава	јàхати
xotěti	хотѣти	хотіти	хотеть	хацець	ща	ќе	хтѐти
iti	ити	іти	идти	ісці	ида	иде	ѝћи
klęti	клѧти	клясти	клясть	клясці	кълна	колне	кле́ти
kьrmiti	кръмити	кормити	кормить	карміць	кърмя	крми	кр̀мити
melti	млѣти	молоти	молоть	малоць	меля	меле	млѐти

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
lân	len	len	l'an	len	lan	l'ån
malína	malina	malina	malina	malena	malina	molainɔ
óreh	orzech	ořech	orech	worjech	worjech	vrex
óves	owies	oves	ovos	wows	wows	vüvas
prosọ̑	proso	proso	proso	proso	pšoso	prüsü
pšeníca	pszenica	pšenice	pšenica	pšeńca	pšenica	pasínaică
ř̂ž	reż	rež	raž	rož	rež	—
slíva	śliwa	slíva	sliva	slowka	sliwa	slaivo
smréka	świerk	smrk	smrek	šmrěk	škrjok	—
tráva	trawa	tráva	tráva	trawa	tšawa	—
vŕba	wierzba	vrba	vŕba	wjerba	wjerba	—
žélod	żołądź	žalud	žalud'	żołdź	żołź	zelọd
žíto	żyto	žíto	žito	žito	żyto	zaitü

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
bežáti	biec	běžeti	bežat'	běžeć	běžaś	bezət
bíti	bić	bíti	bit'	bić	biś	bait
bolẹ́ti	boleć	boleti	boliet'	boleć	boleś	bülĕ
bíti	być	býti	byt'	być	byś	boit
česáti	czesać	česati	česat'	česać	cesaś	cesət
čúti	czuć	číti	čut'	čuć	cuś	cają
dáti	dać	dáti	dat'	dać	daś	dot
držáti	dzierżyć	držeti	držat'	dźeržeć	źaržaś	dirzĕt
jâhati	jechać	jeti	—	jěć	jěś	—
htẹ́ti	chcieć	chtíti	chciet'	chcyć	kśěś	cą
íti	iść	jíti	ist'	hić	hyś	ait
klẹ́ti	kląć	klíti	kliat'	kleć	klěś	klaně (3s)
kŕmiti	karmić	krmiti	kŕmit'	kormić	kjarmiś	—
mléti	mleć	mlíti	mliet'	mlěć	mlaś	mlåt

COMMONLY USED VERBS (cont'd)

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
modliti sę	молитисѧ	молитися	молиться	маліцца	моля	молисе	мо̀лити
mьlčati	мльчати	мовчати	молчать	маўчаць	мълча	молчи	му́чати
pekti	пешти	пекти	печь	пячы	пека	пече	пѐћи
sějati	сѣти	сіяти	сеять	сеяць	сея	сее	сȕјати
tręsti	трѧсти	трясти	трясти	трэсці	треса	тресе	тре́сти
tъkati	тъкати	ткати	ткать	ткаць	тъка	ткае	тка̏ти
variti	варити	варити	варить	варыць	варя	вари	ва́рити
vezti	вести	везти	везти	везці	возя	вози	во̀зити
vęzati	вѧзати	в'язати	вязать	вязаць	вежа	везе	ве́зати
žiti	жити	жити	жить	жыць	живея	живее	жи́вети

KINSHIP TERMS

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
baba	баба	баба	баба	баба	баба	баба	ба̏ба
brat(r)ъ	брат(ꙑ)ъ	брат	брат	брат	брат	брат	бра̏т
čelověkъ	чловѣкъ	чоловік	человек	чалавек	човек	човек	чо̀век
dědъ	дѣдъ	дід	дед	дзед	дядо	дедо	дѐд
dětę	дѣтѧ	дитя	дитя	дзіця	дете	дете	де́те
děverь	дѣверь	дівер	деверь	дзевер	девер	девер	дѐвēр
dъkti	дъшти	дочка	дочь	дачка	дъщеря	ќерка	кћȗ
l'udьje	людиѥ	люди	люди	людзі	люде	луѓе	љȕди
mati	мати	мати	мать	маці	майка	мајка	мâјка
mǫžь	мѫжь	муж	муж	муж	мъж	маж	мȕж
nevěsta	невѣста	невістка	невестка	нявестка	невеста	невеста	нѐвеста
otьcь	отьць	отець	отец	айцец	отец	отец	о̀тац
sestra	сестра	сестра	сестра	сястра	сестра	сестра	сѐстра
synъ	сынъ	син	сын	сын	син	син	сȋн
svekrъ	свекръ	свекор	свёкор	свёкар	свекър	свекор	свёкар
tьstь	тьсть	тесть	тесть	цесць	тъст	тест	тâст
vъnukъ	въноукъ	онук	внук	унук	внук	внук	у̀нук
zętь	зѧть	зять	зять	зяць	зет	зет	зѐт
žena	жена	жінка	жена	жонка	жена	жена	жѐна

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
mọ́liti	modlić się	modliti se	modlit' sa	modlić so	modliś se	—
mọ́lčati	milczeć	mlčeti	mlčat'	mjelčeć	mjelcaś	måuc-
péči	piec	péci	piect'	pjec	pjac	pice
sejáti	siać	síti	siat'	syć	seś	sijot
trẹ́sti	trząść	třásti	triast'	třasć	tśěsć	trąsě (3s)
tkáti	tkać	tkáti	tkat'	tkać	tkaś	tåkăt
varíti	warzyć	vařiti	varit'	warić	wariś	vorět
vozíti	wozić	voziti	vozit'	wozyć	wozyś	vist
vẹ́zati	wiązać	vázati	viazat'	wjazać	wězaś	vọ́săt
živẹ́ti	żyć	žíti	žit'	žić	žyś	—

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
bába	baba	bába	baba	baba	baba	babə
brȁt	brat	bratr	brat	bratr	bratš	brot
človek	człowiek	člověk	človek	człowjek	cłowjek	clåvək
dĕd	dziad	děd	ded	dźěd	źěd	—
dẹ́te	dziecię	dítě	diet'a	dźěćo	źiśe	detą
devẹ̑r	dziewierz	děver	dever	—	—	—
hčî	córa	dcera	dcéra	—	—	—
ljudjẹ̑	ludzie	lidé	l'udia	ludźo	luźe	l'ą̆udi
máti	matka	matka	matka	mać	maś	motai
mọ̑ž	mąż	muž	muž	muž	muž	—
nevẹ́sta	niewiasta	nevěsta	nevesta	njewjesta	—	—
óče	ojciec	otec	otec	wótc	wośc	—
séstra	siostra	sestra	sestra	sotra	sotša	sestrə
sîn	syn	syn	syn	syn	syn	såinkə
svẹ́ker	świekr	—	svokor	—	—	—
tâst	teść	tchán	test'	—	—	—
vnúk	wnuk	vnuk	vnuk	wnuk	—	—
zĕt	zięć	zet'	zat'	—	—	zątěk
žéna	żona	žena	žena	žona	žona	zenə

NATURE, TOOLS, HOUSING

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
bergъ	брѣгъ	берег	берег	бераг	бряг	брег	брȇг
borna	—	борона	борона	барана	брана	брана	бра́на
cěrъ	—	ціп	цеп	цэп	цеп	—	цȇп
čadъ	чадъ	чад	чад	чад	чад	чад	ча̑д
čьlnъ	—	човен	челн	човен	члун	чун	чу̑н
dьnь	дьнь	день	день	дзень	ден	ден	да̑н
dolъ	долъ	діл	дол	дол	дол	дол	до̑(л)
domъ	домъ	дім	дом	дом	дом	дом	до̑м
dъždžь	дъждь	дощ	дождь	дождж	дъжд	дожд	да̑жд
dymъ	дымъ	дим	дым	дым	дим	дим	ды̏м
dvьrь	двьрь	двері	дверь	дзверы	двери	двер	две̑ри
dvorъ	дворъ	двір	двор	двор	двор	двор	дво̑р
(j)ezero	ѥзеро	озеро	озеро	возера	езеро	езеро	је̏зеро
gora	гора	гора	гора	гара	гора	гора	го̀ра
gvězda	звѣзда	звізда	звезда	—	звезда	звезда	зве́зда
kamy	камы	камінь	камень	камень	камен	камен	ка̏мȇн
lěto	лѣто	літо	лето	лета	лято	лето	ле̏то
měsęcь	мѣсѧць	місяць	месяц	месяц	месец	месец	ме̏сȇц
noktь	ношть	ніч	ночь	ноч	нощ	ноќ	но̑ћ
ognь	огнь	(в)огонь	огонь	агонь	огън	оган	о̀гањ
osь	ось	вісь	ось	вось	ос	оска	о̑с
plugъ	плоугъ	плуг	плуг	плуг	плуг	плуг	плу̏г
polje	поле	поле	поле	поле	поле	поле	по̏ље
rěka	рѣка	ріка	река	рэчка	река	река	ре́ка
rosa	роса	роса	роса	раса	роса	роса	ро̀са
sněgъ	снѣгъ	сніг	снег	снег	сняг	снег	снȇг
sъlnьce	слъньце	сонце	солнце	сонца	слънце	сонце	су̑нце
větrъ	вѣтръ	вітер	ветер	вецер	вятър	ветар	ве̏тар
voda	вода	вода	вода	вада	вода	вода	во̀да
vozъ	возъ	віз	воз	воз	воз	воз	во̑з
zemja	земля	земля	земля	зямля	земя	земја	зѐмља
zolto	злато	золото	золото	золата	злато	злато	зла̑то

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
brę̂g	brzeg	břeh	breh	brjóh	brjog	brig
brána	brona	brány	brány	bróna	brona	bornə
cę̂p	cep	cep	cep	cypy	cepy	cepoi
čâd	czad	čad	čad	—	—	cod
čôln	czółno	člun	čln	čołm	cołn	câun
dân	dzień	den	deň	dźeń	źeń	dan
dǫ̂l	dół	důl	dol	doł	doł	döl
dǫ̂m	dom	dům	dom	dom	dom	düm
dèž	deszcz	déšť	dážď	dešć	dešć	dâzd
dîm	dym	dým	dym	dym	dym	dâim
dúri	drzwi	dveře	dvere	durje	drwi	dvar
dvȍr	dwór	dvůr	dvor	dwór	dwor	dör
jezę̂ro	jezioro	jezero	jazero	jězor	jazor	—
góra	góra	hora	hora	hora	gora	d'örə
zvę́zda	gwiazda	hvězda	hviezda	hwězda	gwězda	—
kámen	kamień	kámen	kameň	kamjeń	kamjeń	komoi
lę́to	lato	léto	leto	lěto	lěto	—
mę̂sec	miesiąc	měsíc	mesiac	měsac	mjasec	—
nǫ̂č	noc	noc	noc	nóc	noc	nüc
ógenj	ogień	oheň	oheň	woheň	wogeń	vid'ėn
ǫ̂s	oś	os	os	wóska	wos	vüs
plûg	pług	pluh	pluh	płuh	pług	pläug
poljȩ̂	pole	pole	pole	polo	polo	pülü
rę́ka	rzeka	řeka	rieka	rěka	rěka	reka
rósa	rosa	rosa	rosa	rosa	rosa	—
snę̂g	śnieg	sníh	sneh	sněh	sněg	sneg
sǫ̂lnce	słońce	slunce	slnce	słónco	słyńco	—
vę̂ter	wiatr	vítr	vietor	wětr	větš	v'otěr
vóda	woda	voda	voda	woda	woda	vådə
vǫ̂z	wóz	vůz	voz	wóz	woz	våz
zémlja	ziemia	země	zem	zemja	zemja	ziḿə
zlatǫ̂	złoto	zlato	zlato	złoto	złoto	zlåtə

TERMS REFERRING TO NOURISHMENT

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
doiti	доити	доїти	доить	даіць	доя	дои	дòјити
ěsti	ѣсти	їсти	есть	есці	ям	јаде	јѐсти
xlěbъ	хлѣбъ	хліб	хлеб	хлеб	хляб	леб	хлѐб
kvasъ	квасъ	квас	квас	квас	квас	квас	квâс
lojь	лои	лій	лой	лой	лой	лој	лôј
maslo	масло	масло	масло	масла	масло	масло	мàсло
medъ	медъ	мед	мед	мёд	мед	мед	мêд
melko	млѣко	молоко	молоко	малако	мляко	млеко	млéко
męso	мясо	м'ясо	мясо	мяса	месо	месо	мêсо
mǫka	мжка	мука́	мука́	мука́	—	—	му́ка
piti	пити	пити	пить	піць	пия	пие	пи̏ти
pivo	пиво	пиво	пиво	піва	пиво	пиво	пи̏во
sadlo	—	сало	сало	сала	сало	сало	сàло
syrъ	сыръ	сир	сыр	сыр	сирене	сирење	сѝр
sytъ	сытъ	ситий	сытый	сыты	сит	сит	сѝт
těsto	—	тісто	тесто	цеста	тесто	тесто	тêсто
vino	вино	вино	вино	віно	вино	вино	ви́но

PARTS OF THE BODY (HUMAN AND NON-HUMAN)

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
borda	брада	борода	борода	барада	брада	брада	бра́да
bry	бръвь	брова	бровь	брыво	—	—	о̀брва
čelo	чело	чоло	чело	чало	чело	чело	чѐло
čel'ustь	челюсть	челюсть	челюсть	—	челюст	челуст	чѐљӯст
červo	чрѣво	черево	черево	чэрава	черво	црево	цре́во
dęsna	—	ясна	десна	дзясна	—	—	дêсни
dolnь	длань	долоня	ладонь	далонь	длан	длан	дла̀н
golva	глава	голова	голова	галава	глава	глава	гла́ва
językъ	ꙗзыкъ	язик	язык	язык	език	јазик	јѐзик

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
dojíti	doić	dojiti	dojit'	dejić	dojś	düjě
jẹ́sti	jeść	jísti	jest'	jěść	jěść	jest
hlẽb	chleb	chléb	chlieb	chlěb	klěb	—
kvâs	kwas	kvas	kvas	kwas	kwas	kos
lǫ̂j	łój	lůj	loj	łój	łoj	lüj
máslo	masło	máslo	maslo	masło	masło	most'ə
mẹ̑d	miód	med	med	měd	mjod	med
mlẹ́ko	mleko	mléko	mlieko	mloko	mloko	mlåkə
mesǫ̂	mięso	máso	mäso	mjaso	měso	mąsü
mǫ́ka	mąka	mouka	múka	muka	muka	mǫkə
píti	pić	píti	pit'	pić	piś	pait
pívo	piwo	pivo	pivo	piwo	piwo	paivü
sálo	sadło	sádlo	sadlo	sadło	sadło	sodlü
sȋr	ser	sýr	syr	syra	sera	sar
šȋt	syty	sytý	sýty	syty	syty	såitə
testǫ̂	ciasto	těsto	cesto	ćěsto	śěsto	t'ostü
víno	wino	víno	víno	wino	wino	vainə

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
bráda	broda	brada	brada	broda	broda	brödə
obȓv	brew	brva	brva	brjowka	—	bråvoi
čélo	czoło	čelo	čelo	čoło	coło	celü
čeljûst	czeluść	čelist	čel'ust'	čelesno	—	cil'aųst
črevǫ̂	trzewo	střevo	črevo	črjewo	crjowo	crevü
dlésna	dziąsło	daseň	d'asno	dźasna	źesna	d'ǫsnə
dlȁn	dłoń	dlaň	dlaň	dłóń	dłoń	dlån
gláva	głowa	hlava	hlava	hłowa	głowa	glåvə
jézik	język	jazyk	jazyk	jazyk	jězyk	jǫzěk

PARTS OF THE BODY (HUMAN AND NON-HUMAN) (cont'd)

PSl	*OCS*	*Ukr*	*R*	*Br*	*Blg*	*M*	*SC*
kostь	кость	кість	кость	косць	кост	коска	кӑ̂ст
koža	кожа	кожа	кожа	—	кожа	кожа	кӑ̀жа
kry	кръвь	кров	кровь	кроў	кръв	крв	кр̂в
noga	нога	нога	нога	нага	нога	нога	нӑ̀га
nogъtь	ногътъ	ніготь	ноготь	ногаць	нокът	нокот	нӑ̀кат
nosъ	носъ	ніс	нос	нос	нос	нос	нӑ̂с
oko	око	око	око	вока	око	око	ӑ̀ко
olkъtь	лакътъ	лікоть	локоть	локаць	лакът	лакот	лӑ̂кат
paĺьcь	—	палець	палец	палец	палец	палец	пӑ̂лац
pęta	пѧта	п'ята	пята	пята	пета	петица	пе́та
pьrstъ	пръстъ	перст	перст	—	пръст	прст	пр̆̂ст
rǫka	рѫка	рука	рука	рука	ръка	рака	ру́ка
sьrdьce	сръдьце	серце	сердце	сэрца	сърце	срце	ср̆̂це
tělo	тѣло	тіло	тело	цела	тяло	тело	тӗ̂сто
vьlna	вльна	вовна	волна	воўна	вълна	волна	вў̆на
vymę	—	вим'я	вымя	вымя	виме	виме	вӣ̆ме
zǫbъ	зѫбъ	зуб	зуб	зуб	зъб	заб	зў̆б

Sln	*P*	*Cz*	*Slk*	*UL*	*LL*	*Polab.*
kǫ̑st	kość	kost	kost'	kósć	kosć	t'ust
kǫ́ža	koża	kůže	koža	koža	koža	t'üzə
krî	krew	krev	krv	krej	kšej	k(a)râi
nóga	noga	noha	noha	noha	noga	nügə
nohât	nogieć	nehet	necht	nochć	nokś	nüd'ėt
nǫ̑s	nos	nos	nos	nós	nos	nüs
okǫ̑	oko	oko	oko	woko	woko	—
lakât	łokieć	loket	laket'	łochć	łokś	lüt'ėt
pâlec	palec	palec	palec	palc	palc	polac
péta	pięta	pata	päta	pjata	pěta	pǫ́ta
pr̂st	—	prst	prst	porst	—	—
róka	ręka	ruka	ruka	ruka	ruka	rǫkə
srcę̑	serce	srdce	srdce	—	—	—
telǫ̑	ciało	tělo	telo	ćełło	śełło	—
vǫ́lna	wełna	vlna	vlna	wołma	wałma	våuno
víme	wymię	výmě	vemeno	wumjo	wumje	voimą
zǫ̑b	ząb	zub	zub	zub	zub	sumb

Some Parallel Texts in Slavic Languages

GROUP I: From the New Testament, Luke X, 30-5. Adapted from R. Nahtigal, *Die Slavischen Sprachen.* Wiesbaden 1961.

OLD CHURCH SLAVONIC

30. Чк҃ъ етеръ съхождааше · отъ іл҃ма въ ерихѫ · і въ разбоіникы въпаде · іже і съвлъкъше і · і ѣзвы възложьше отидошѧ · і оставьше і елѣ живъ сѫшть. 31. по прикл҃ючаю же · іерѣі етеръ · съхождааше пѫтьмь тѣмь · і видѣвъ і мимо іде · 32. такожде же і леѵѣитъ · бывъ на томь мѣстѣ · пришьдъ · і видѣвъ і мимо іде · 33. самарѣнинъ же етеръ грѧды · приде надъ н҃ь · і видѣвъ і милосръдова · 34. і пристѫпл҃ь обѧза строѵпы его · вьзливаѩ масло і вино · въсаждь же і на своі скотъ · приведе же і въ гостиницѫ · і прилежа емь · 35. і на оутрьѣ ішьдъ · ізьмъ д'ва пѣнѧза дастъ гостинникоу · і рече емоу · прилежи емь · і еже аште приіждівеши · азъ егда възвраштѫ сѧ въздамь ти ·

(Codex Zographensis)

OLD CHURCH SLAVONIC

(Standardized reconstruction)

30. Чловѣкъ етеръ съхождааше отъ іероусалима въ іерихѫ · і въ разбоіникъи въпаде · іже і съвлькъше і. і ѣзвъи възложьше отидѫ · оставл҃ьше і елѣ живъ сѫшть 31. по прикл҃ючаю же іереі етеръ съхождааше пѫтьмь тѣмь · і видѣвъ і мимо іде · 32. такожде же і левьѣитъ бъивъ на томь мѣстѣ пришьдъ і видѣвъ і мимо іде · 33. самар҃ѣнинъ же етеръ грѧдъи приіде надъ н҃ь і видѣвъ і милосрьдова[8] · 34. і пристѫпл҃ь обѧза строѵпъи его възливаѩ масло і вино · въсаждь же і на своі скотъ приведе і въ гостиньницѭ · і прилежа емь · 32. і на оутриѣ[11] ішьдъ ізьмъ дъва пѣнѧзѣ дастъ гостиньникоу і рече емоу · прилежи емь · і еже аште приіждивеши азъ егда възвраштѭ сѧ въздамь ти ·

RUSSIAN CHURCH SLAVONIC

30. Человѣ́къ нѣ́кїй схожда́ше ѿ Іерⷭ҇ли́ма во Іерїхѡ́нъ, и въ разбо́йники впаде́ и́же совле́кше єго́, и ꙗ́звы возло́жше ѿидо́ша, ѡста́вльше єдва жи́ва сꙋ́ща. 31. По слꙋ́чаю же свѧще́нникъ нѣ́кїй схожда́ше пꙋте́мъ тѣ́мъ, и видѣ́въ єго́, мимои́де. 32. Та́кожде же и леѵі́тъ, бы́въ на то́мъ мѣ́стѣ, прише́дъ и ви́дѣвъ мимои́де. 33. Ꙗмарѧни́нъ же нѣ́кто грѧды́й, прїи́де над' него́, и ви́дѣвъ єго́, милосе́рдова. 34. И пристꙋ́пль ѡбвѧза́ стрꙋ́пы єгѡ́, возлива́ѧ ма́сло и вїно̀: всади́въ же єго̀ на сво́й ско́тъ, приведѐ єго̀ въ гости́нницꙋ, и прилежа̀ ємꙋ̀: 35. и наꙋ̀трїѧ изше́дъ, изе́мъ два̀ сре́бреника, дадѐ гости́нникꙋ, и речѐ ємꙋ̀: прилежѝ ємꙋ̀: и, е́же а́ще прїиждиве́ши, а́зъ, єгда́ возвращꙋ́сѧ, возда́мъ тѝ.

CROATIAN CHURCH SLAVONIC

30. Člověk jeter shođaše ot Jerusolima v Jerihu, i vpade v razbojniki, iže i svlkše-i, i jazvi stvorše otidu, ostavalše-i jelě živa. *31.* Priključi že se jerěju jeteru shoditi putem tem: i viděv-i mimo ide. *32.* Takođe i levǵit, biv pri tom městě, i viděv-i mimo ide. *33.* Samaranin že jeter, gredi putem těm, pride nadań: i viděv i milosrdova. *34.* I pristupal obeza rani jego, vzlivaje olěj i vino: i vsađ-i na kljuse svoje, privede v gostinnicu i prileža jemu. *35.* V drugi že dan iznese dva pěneza, i dast gostinniku, i reče: Prileži jemu, i ježe ašće priiždiveši, az jegda vazvraću se, vzdam ti.

CZECH

30. Člověk jeden šel z Jeruzaléma do Jericho i upadl mezi lotry. Kteřiž obloupivše jej a zranivše, odešli, odpolu živého nechavše. *31.* I přihodilo se, že kněz jeden šel touž cestou a uzřev jej, pominul. *32.* Též i Levíta přišed až k tomu místu a uzřev jej, pominul. *33.* Samaritán pak jeden, cestou se ubiraje, přišel až k ňemu a uzřev jej, milosrdenstvím hnut jest. *34.* A přistoupiv, uvázal rány jeho, naliv oleje a vína a vloživ jej na hovado své, vedl do hospody a péči o něj měl. *35.* Druhého pak dne odjíti maje, vyňav dva peníze, dal hospodáři a řekl jemu: Měj o něj péči, o cožkoli nad to vynaložíš, já když se vrátím zaplatím tobě.

(*Biblí Svatá.* Prague, 1920. *Nový zákon,* pg. 59.
Reprinted from *Kralická Biblí,* 1613)

SLOVAK

30. Istý človek išiel z Jeruzalema dolu do Jericha a upadnul medzi lotrov, ktorí ho i vyzliekli i zranili a odišli zanechajúc ho polomrtvého. *31.* A náhodou išiel tiež dolu jakýsi kňaz, tou istou cestou, a ked' ho zazrel, obišiel druhou stranou. *32.* A podobne aj nejaký Levita, ktorý idúc tiež dolu prišiel na to miesto, a ked' prišiel a videl, obišiel druhou stranou. *33.* No, potom prišiel k nemu istý Samaritán, uberajúci sa cestou, a ked' ho videl, milosrdenstvom bol hnutý. *34.* A pristúpil a poobväzoval jeho rany a polial olejom a vínom a vyložiac ho na svoje vlastné hovädo zavíedol ho do hostinca a postaral sa o neho. *35.* A druhého dňa, ked' odchádzal, vyňal dva denáre, dal hostinskému a povedal mu: Maj na neho starosť, a čo by si nad to viacej vynaložil, ja ti, ked' zase prijdem, zaplatím.

(*Svätá Biblia.* Prague, 1936.
Nový zákon, pg. 84-5)

POLISH

30. Człowiek niektóry zstępował z Jeruzalem do Jerycha i wpadł między zbójce, którzy go też złupili i rany zadawszy odeszli, na poły umarłego zostawiwszy. *31.* I przydało się, że niektóry kapłan zstępował tąż drogą, a ujrzawszy go, minął. *32.* Także i Lewit, będąc podle miejsca i widząc go, minął. *33.* A Samarytan niektóry jadąc, przyszedł wedle niego, i ujrzawszy go, miłosierdziem wzruszony jest. *34.* A przybliżywszy się, zawiązał rany jego, nalawszy oliwy i wina, a włożywszy go na bydlę swoje, prowadził do gospody i miał pieczą o nim. *35.* A nazajutrz wyjął dwa grosze i dał gospodarzowi i rzekł: Miéj staranie o nim, a cokolwiek nadzwyż wydasz, ja, gdy się wrócę, oddam tobie.

(Reprint of Fr. J. Wujek's translation from 1599.
British and Foreign Bible Society, Warsaw, 1960, pg. 80)

UPPER LUSATIAN

30. Jedyn človjek dźěše z Jeruzalema do Jericho, a padźe mjez rubježnikow, kotřiž jeho wurubiwši a zraniwši woteńdźechu, jeho napoł mortweho wostajiwši. *31.* Sta pak so, zo měšnik po tom samym puću dźěše, a wuhladawši jeho, přeńdźe nimo. *32.* Tak tež lewita, jako tam porno přińdźe a jeho wuhlada, přeńdźe nimo. *33.* Jedyn Samaritan pak (tam) pućujo přińdźe porno njemu, a wuhladawši jeho bu z miłosću hnuty. *34.* A přistupiwši, zawjaza jeho rany, wolij a wino na nje linywši, a sadźi jeho na swoje skoćo, dowjedźe jeho do hospody, a zastara jeho. *35.* A nazajtra wućahnywši dwaj dźesatnikaj da jéj hospodarjej a praji: Staraj so za njeho, a štožkuli wjacy wułožiš, ja, hdyž so wróću, zapłaću tebi".

(*Nowy Zakoń.* Translated by J. Lusčanski and M. Hórnik.
Bautzen, 1896, pg. 104)

LOWER LUSATIAN

(Rewritten in the new orthography)

30. Cłowjek źešo wot Jeruzalema dołoj do Jerichowa, a pajźe mjazy mordarjow, te jogo też zeblacochu, a zbichu, a źechu pšejc, wostawjece jogo na poł wumarłego. *31.* Wono pak pšigoźecy se stanu, aż jaden mjeršnik na tej samej droze dołoj źešo, a gaž jogo wupyta, źešo won mimo. *32.* A teje rownosći też lewita, gaž won na to město pšiźe, a jogo wiźešo, źešo won mimo. *33.* Jaden Samariski pak ducy na tej droze, pšiźe tam, a gaž won jogo wiźešo, bu jomu jogo luto. *34.* A pšistupjecy k njomu hobalowašo won jogo rany, a lejašo nutš wolej a wino a sajźi jogo na swojo zwěrje, wjéźešo jogo do gospody a zažarbowašo jogo. *35.* A na drugi źeń dalej ducy wujmje won dwa kroša, a da jej tomu gospodarjoju, a źašo k njomu: „Zažarbuj jogo, a buźoš li njeco wjecej nałožyš, cu ja tebe jo zapłašiš, gaž ja pšidu".

(*Nowy Testament.* Translated by G. Fabricius. Halle, ca. 1896, pg. 93)

UKRAINIAN

30. Один чоловік ішов з Єрусалиму до Єрихóну, і попався розбійникам, що обдерли його, і завдалú йому рани, та й утеклú, покинувши лéдве живого йогó. *31.* Прохóдив випáдком тією дорогою священик один, побачив його, — і проминув. *32.* Так само й Левит надійшов на те місце, поглянув, — і теж проминув. *33.* Прохóдив же там якийсь самарянúн, та й натрáпив на нього, і, побачивши, змилосéрдився. *34.* І він підійшов, і обв'язав йому рани, наливши оливи й вина. Потому його посадив на худóбину власну, і приставив його до гостиниці, та й клопотáвся про нього. *35.* А другого дня, від'їжджавши, вийняв він два динарії, та й дав їх госпóдареві й проказав: „Заопікуйся ним, а як більше що витратиш — заплачý тобі, як вернýся".

(*Biblija abo knyhy sv'atoho Pys'ma...* United Bible Societies, 1962, pg. 88-9)

RUSSIAN

30. Некоторый человек шел из Иерусалима в Иерихон и попался разбойникам, которые сняли с него одежду, изранили его и ушли, оставивши его едва живым. *31.* По случаю один священник шел тою дорогою и, увидев его, прошел мимо. *32.* Также и левит, быв на том месте, подошел, посмотрел и прошел мимо. *33.* Самарянин же некто, проезжая, нашел на него и, увидев его, сжалился. *34.* И подошед перевязал ему раны, возливая масло и вино; и посадив его на своего осла, привез его в гостинницу и позаботился о нем; *35.* А на другой день, отъезжая, вынул два динария, дал содержателю гостинницы и сказал ему: позаботься о нем; и если издержишь что более, я, когда возвращусь, отдам тебе.

(*Biblija. Knigi svjaščennogo pisanija Vetxogo i Novogo Zaveta.* American Bible Society. New York, 1948, pg. 78)

BELORUSSIAN

(Rewritten in the new orthography)

30. Нейкі чалавек ішоў з Ерузаліму да Ерыхону і папаўся разбойнікам, каторыя знялі з яго вопратку, ранілі яго і пайшлі, пакінуўшы яго ледзь жывым. *31.* Здарэннем адзін свяшчэннік ішоў гэтай дарогай і, угледзіўшы яго, прайшоў міма. *32.* Таксама й лявіт, быўшы на тым месцы, падыйшоў, паглядзеў і прайшоў міма. *33.* Самаранін жа нейкі, ідучы, найшоў на яго і, угледзіўшы, злітаваўся, *34.* і, падыйшоўшы, перавязаў яму раны, паліўшы алеем і віном; і, пасадзіўшы яго на свайго асла, прывёз яго ў заезд і паклапаціўся аб ім; *35.* а на другі дзень, ад'яжджаючы, дастаў два дынары, даў гаспадару заезду і сказаў яму: даглядай яго і, калі выдаш што балей, я, вярнуўшыся, аддам табе.

(*Novy Zapavét.* British and Foreign Bible Societies. London 1948, pg. 98)

BULGARIAN

(Rewritten in the new orthography)

30. Някой си човек слизаше от Ерусалим в Ерихон: и налетя на разбойници, които го съблякоха и нараниха и отидоха си, като го оставиха полумъртъв. *31.* А случайно някой си свещеник слизаше по оня път, и, като го видя, замина си от срещната страна. *32.* Също и един Левит, като стигна на това място и го видя, замина си от срещната страна. *33.* Но един Самарянин, като пътуваше, дойде на мястото дето беше той, и като го видя, смили се, *34.* и се приближи та превърза раните му, като изливаше на тях масло и вино. После го качи на собственото си добиче, закара го в една гостилница, и се погрижи за него. *35.* И на утрешния ден извади два динари та ги даде на гостилничаря и рече: Погрижи се за него; и каквото повече иждивиш, на връщане аз ще ти заплатя.

(*Biblija ili Sveštenoto Pisanie na Starija i Novija zavětъ.* Sofia 1924, pg. 70)

SLOVENE

30. Neki človek je šel od Jeruzalema v Jeriho in je padel med razbojnike; ti so ga oplenili in mu zadali ran, ter so odšli in ga pustili napol mrtvega. *31.* Primerilo se je pa, da je šel po tisti poti neki duhovnik; in ga je videl in šel mimo. *32.* Prav tako je tudi levit, ki je prišel na to mesto in ga videl, šel mimo. *33.* Ko je pa neki popoten Samarijan prišel do njega in ga videl, se mu je v srce zasmilil. *34.* In pristopil je in vlil v njegove rane olja in vina ter jih obvezal; in posadil ga je na svoje živinče, peljal do gostilnice in zanj poskrbel. *35.* Drugi dan je vzel dva denarja in dal gostilničarju ter rekel: „Poskrbi zanj, in kar boš več potrošil, ti jaz nazaj gredé povrnem."

(*Sveto Pismo Novega Zakona,* I. Ljubljana, 1925, pg. 199)

MACEDONIAN

30. Еден човек слегуваше од Ерусалим во Ерихон, и сретна разбојници, кои го соблекоа и му направија рани, и си отидоа, оставајќи го полумртов. *31.* Случајно слегуваше по тој пат еден свештеник и, кога го виде, си замина. *32.* Исто така и еден левит, кога дојде на тоа место, се приближи, погледна и си отиде. *33.* Еден, пак, Самарјанин, кој патуваше, кога дојде до него, го виде и се сожали. *34.* И кога се приближи, му ги преврза раните, поливајќи ги со елеј и со вино; па, откако го качи на добитокот свој, го однесе во гостилница и се погрижи за него. *35.* А утредента, на кинисување, извади два динарија, му ги даде на гостилничарот и му рече: «Припази го; а ако потроши нешто повеќе, кога ќе се вратам, ќе ти платам.»

(*New Testament in Macedonian.*
United Bible Societies, 1976, pg. 96)

SERBIAN (JEKAVIAN)

30. Један човјек силажаше из Јерусалима у Јерихон, на га ухватише хајдуци, који га свукоше и изранише, па отидоше, оставивши га пола мртва. *31.* А изненада силажаше онијем путем некакав свештеник, и видјевши га прође. *32.* А тако и Левит, кад је био на ономе мјесту, приступи, и видјевши га прође. *33.* А Самарјанин некакав пролазећи дође над њега, и видјевши га сажали му се. *34.* И приступивши зави му ране и зали уљем и вином; и посадивши га на своје кљусе доведе га у гостионицу, и устаде око њега. *35.* И сјутрадан полазећи извади два гроша те даде крчмару, и рече му: Гледај га, и што више потрошиш ја ћу ти платити кад се вратим.

(*Novi zavjet. Нови завјет.* Translated
by V. St. Karadžić. Berlin, 1857, pg. 163;
Beograd, 1935, pg. 62ff)

CROATIAN (JEKAVIAN)

30. Neki je čovjek silazio iz Jerusalema u Jerikon i dođe među razbojnike, koji ga svukoše i izraniše, pa otidoše ostavivši ga pola mrtva. *31.* Slučajno je onim putem silazio neki svećenik, i vidjevši ga prođe mimo. *32.* Tako i Levit, kad dođe na mjesto te ga pogleda, prođe mimo. *33.* A neki Samaritanac prolazeći dođe nad njega, i vidjevši ga, sažali mu se. *34.* I pristupivši zavi mu rane i zali uljem i vinom i posadivši ga na svoju magaricu, dovede ga u gostionicu i pobrinu se za njega. *35.* I sutradan izvadi dva dinara, dade krčmaru i reče: Pobrini se za njega, i ako što više potrošiš, ja ću ti platiti, kad se vratim.

(*Sveto Pismo Novoga Zavjeta.*
Zagreb, 1925, pg. 133)

GROUP II: From N. Ostrovskij, *Kak zakal'alas' stal'*. Adapted from N. R. Kondrašov. *Slav'anski jazyki*. Moscow 1962.

CZECH

Korčagin složil hlavu do dlaní a hluboce se zamyslil. Před očima mu plynul celý život, od dětství až do posledních dnů. Prožil dobře nebo špatně svých čtyřiadvacet let? Probíral v paměti rok za rokem, prověřoval svůj život jako nestranný soudce a s dobrým svědomím si přiznal, že neprožil život tak špatně. Ovšem, bylo v něm i nemálo omylů, učiněných z hlouposti, z nezkušenosti a nejvíce z nevědomosti. Hlavně však, že neprospal dny varu, našel své místo v líté srážce za moc a na rudém praporu revoluce je také několik kapek jeho krve.

N. Ostrovskij, *Jak se kalila ocel.*
Praha, 1954, pg. 287

SLOVAK

Korčagin si podoprel hlavu rukami a hlboko sa zamyslel. Pred očami mu prebehol celý život, od malička až do posledných dní. Dobre, a či zle prežil svojich dvadsat'štyri rokov? Preberal v pamäti rok za rokom, skúmal svoj život ako nestranný sudca a s hlbokým uspokojením zistil, že život neprežil najhoršie. Ale bolo v ňom aj hodne chýb, ktorých sa dopustil z hlúposti, pre svoju mladost' a najviac z nevedomosti. Ale čo je najhlavnejšie — neprespal búrlivé dni, našiel svoje miesto v železnom boji o moc a na purpurovej zástave revolúcie je aj niekol'ko kvapiek jeho krvi.

N. Ostrovskij, *Ako sa kalila ocel'*.
Dielo, I, Bratislava, 1954, pg. 388

POLISH

Korczagin objął głowę rękoma i głęboko się zamyślił. Zaczął rozpamiętywać całe swoje życie, począwszy od dzieciństwa aż po ostatnie dni. Jak przeżył te dwadzieścia cztery lata, dobrze czy źle? Przebiegając pamięcią rok po roku, badał swoje życie jak bezstronny sędzia i z głęboką satysfakcją doszedł do wniosku, że nie tak znów źle je przeżył. Lecz znalazł też niemało błędów, popełnionych ze zbytku fantazji, wskutek młodego wieku, a najczęściej z braku wiedzy. Co najważniejsze, nie przespał gorących dni, znalazł dla siebie miejsce w żelaznym zmaganiu się o władzę dla proletariatu i ubarwił purpurowy sztandar rewolucji kilkoma kroplami własnej krwi.

M. Ostrowski, *Jak hartowała się stal,*
Wyd. 3, Warszawa, 1951, pg. 416

UPPER LUSATIAN

Korčagin zlehny hłowu do rukow a so hłuboko zamisli. Před jeho wóčkomaj přeběhny wšo jeho žiwjenje, z dźěćacych hač do poslednich dnjow. Je-li derje, je-li špatnje přežiwił swoje štyrceci lět? Rozwažowaše w pomjatku lěto za lětom, pruwujo swoje žiwjenje kaž sudnik bjeze wšitkich předsudkow, a z hłubokim spokojenjom zwěsći, zo swojo žiwjenje scyła tak špatnje wužił njebě. Ale bě tež njemało zmylkow zworał, zdźěła z hłuposću, zdźěła z młodosću, najwjac wšak z njewědu. Hłowna wěc pak běše — wón njebě skomdźił horce dny wojowanja, bě namakał swoje městno w železnym boju wo móc swojeje klasy, a na krejčerwjenej chorhoji rewolucije běchu tež někotre kapki jeho kreje.

Translated for Kondrašov by Jan Žur,
Institute of Sorbian Ethnography. Bautzen

LOWER LUSATIAN

Dłymoko zamyslony jo se Korčagin z rukoma za głowu pśimnuł. Cełe jogo žywjenje jo pśed jogo wocoma wotběžało, ze źěśetstwa aż do slědnych dnjow. Jo ga derje abo špatnje pśeżywił swoje styri a dwaźasća lět? Lěto wob lěto pśeglědajucy w spomnjeśu jo won pśekontrolował swojo žywjenje, kaž njestronski sudnik a z dłymokeju spokojnosću jo won zwěśćił, aż docela njejo žywjenje tak špatnje pśeżywił. Jo wšak teke było dosć zmolkow, kenž su se gotowali z głuposću, w młodości, z wjetšego pak njewědy dla. Nejważnjejše pak jo, aż won njejo pśespał goruce dny, ale aż jo namakał swojo město w kšutem wojowanju wo moc, a na šamnocerwjenej chorgoji rewolucije su teke někotare chrapki jogo kšwě.

Translated for Kondrašov by Wilhelm Bero,
Institute of Sorbian Ethnography. Bautzen

UKRAINIAN

Корчагін охопив голову руками й тяжко замислився. Перед його очима пробігло все його життя, від дитинства й до останніх днів. Чи добре, чи погано прожив він свої двадцять чотири роки? Перебираючи в пам'яті рік за роком, перевіряв своє життя, як безсторонній суддя, і з глибоким задоволенням вирішив, що життя прожито не так уже й погано. Та було чимало й помилок, зроблених здуру, через молодість, а найбільше через необізнаність. Найголовніше ж — не проспав гарячих днів, знайшов своє місце в залізній боротьбі за владу, і на багряному прапорі революції є кілька краплин і його крові.

М. Островський, *Як гартувалася сталь*.
Молодь, Київ, 1951, pg. 271

RUSSIAN

Корчагин охватил голову руками и тяжело задумался. Перед его глазами пробежала вся его жизнь, с детства и до последних дней. Хорошо ли, плохо ли он прожил свои двадцать четыре года? Перебирая в памяти год за годом, проверял свою жизнь, как беспристрастный судья, и с глубоким удовлетворением решил, что жизнь прожита не так уж плохо. Но было немало и ошибок, сделанных по дури, по молодости, а больше всего по незнанию. Самое же главное — не проспал горячих дней, нашел свое место в железной схватке за власть, и на багряном знамени революции есть и его несколько капель крови.

Н. Островский, *Как закалялась сталь*,
часть вторая, глава восьмая

BELORUSSIAN

Карчагін абхапіў галаву рукамі і цяжка задумаўся. Перад яго вачыма прабягала ўсё яго жыццё, з маленства і да апошніх дзён. Ці добра, ці дрэнна пражыў ён свае дваццаць чатыры гады? Перабіраючы у памяці год за годам, правяраў сваё жыццё, як бесстаронні суддзя, і з глыбокім задаваленнем вырашыў, што жыццё пражыта не так ужо дрэнна. Але было нямала і памылак, зробленых па дурасці, па маладосці, а больш за ўсё па няведанню. Самае-ж галоўнае — не праспаў гарачых дзён, знайшоў сваё месца ў жалезнай схватцы за ўладу, і на барвовым сцягу рэволюцыі ёсць і яго некалькі кропель крыві.

Н. Астроўскі, *Як гартавалася сталь*.
Народжанія бурай, Мінск, 1950, pg. 342

BULGARIAN

Корча́гин хва́на глава́ти си с ръце́ и те́жко се зами́сли. Пред очи́те му преми́на це́лият му живо́т, от дети́нство и до после́дни дни. Добре́ ли, зле́ ли преживе́ той два́йсет и че́тири годи́ни? Като́ прехвъ́рляше в паметта́ си годи́на след годи́на, провери́вайки живо́та си като́ безпристра́стен съдия́, реши́ с удовлетворе́ност, чи е приживя́л живо́та си не то́лкова ло́шо. Но и́маше и не ма́лко гре́шки, въ́ршени от глу́пост, поради́ младостта́ му, а на́й-мно́го по незна́ние. А на́й-гла́вното, не проспа́ пла́менните дни, наме́ри сво́ето мя́сто в желя́зната схва́тка за властта́, и върху́ черве́ното зна́ме на револю́цията и́ма и ня́колко ка́пки не́гова кръв.

N. Ostrovski, *Kak se kal'avaše stomanata*. Translated by L. Stojanov.
Sofia, 1944, pg. 473-4.

SLOVENE

Korčagin sê jê prijél za glávo in sê pogréznil v têžke mísli. Vsê njegôvo življênje od otróških lét dô zádnjih dní mu je w náglih slíkah vstájalo prêd očmí. Ali je bil dôbro prežível svôjih štíri in dvájset lét, áli jih jê bil slábo prežível? Kó jê v míslih téhtal léto za létom in prevérjal svôje življênje kot nêpristranski sodník, jê z globôkim zadoščênjem spoznál, da práv za práv ni živél kdó vé kakó slabó. Rés je bílo nemálo túdi napák, storjênih iz nespámeti, iz mladósti, najvêčkrat pa iz nevédnosti. Ali, in tó jê bílo poglavítno — vróčih dní ní bíl prespál, nášel je bil svôje mésto v želéznem spopádu za oblást, in na škrlátni zastávi revolúcije je bílo túdi njegôvih nékaj kápelj krví.

N. Ostrovski, *Kako se je kalilo jeklo.*
Mladinska knjiga, Ljubljana 1945, pg. 403

MACEDONIAN

Корчагин ја фати главата со рацете и тешко се замисли. Пред неговите очи му помина целиот живот од детството па до последните денови. Убаво ли или лошо ги поминал своите дваесет и четири години? Превртувајќи ги во паметта годините една по една, го проверуваше својот живот како непристрасен судија и со длабоко задоволство заклучи дека не го поминал животот толку лошо. Но имало и доста грешки што ги направил од глупост, од младост, а наїмногу од незнаеще. Што е наїважно — не ги преспал бурните денови, си го нашол местото во железната борба за власт, и на црвеното знаме на револуциїата има и неколку капки негова крв.

Translated for Kondrašov by B. Vidoeski,
Department of Philosophy, University of Skopje.

SERBO-CROATIAN

Serbian Variant

Ко̀рчагин о̏бухвати главу ру̀кама и тѐшко се за̀мисли. Пред о̀чима му је пролѐтео цѐо њѐгов живот од дѐтињства па до по̀следњи̏х да́нā. Да̏ ли је лепо ѝли р̀ђаво прожѝвео сво̀је два́десет чѐтири го̏динē? Прѐтрēсао је, сѐћајӯћи се го̏динē за го̏динōм, провера́вао свôј жѝвот ка̏о непристраснӣ су̀дија и са ду̀бокӣм је задово́љством ре́шио да нѝје тако рђаво прожи́вео жѝвот. А̏ли је би̏ло до̏ста и грѐшāкā ко̀јē је учѝнио из глу́пости, збо̏г мла̏дости, а прêсвѐга из незна́ња. Што̏ је нâјва̀жнијē, није преспа́вао ва̏тренē дâнē, на̀шао је сво̀је мѐсто у чѐличнōј бо̀рби за влâст, и на црвенōј зâстави револу́цијē ѝма и нѐколико њѐгови̏х кâпи крви.

Н. Островскиј, *Како се калио челик.*
Ново поколење, Београд, 1945, pg. 343

Croatian Variant

Kòrčagin ôbuhvati glâvu rùkama i tèško se zàmisli. Pred ôčima mu je polètio cijêlī njègov život od djètīnjstva pa do pòsljednjīh dánā. Dà lī je lījepo ìli lôšē prožívio svòje dvádeset čètiri gôdinē? Prètrēsao je, sjěćajūći se gôdinē za gôdinōm, provjerávao svôj život kão nepristranī súdac i s dùbokīm je zadovóljstvom rijèšio da nije tâko lôšē prožívio život. Âli je bīlo dôsta i grěšākā kòjē je učínio iz glúposti, zbôg mlâdosti, a prije svèga iz neznánja. Štô je nâjvàžnijē, nìje prespávao vâtrenē dânē, nàšao je svòje mjèsto u čèličnōj bòrbi za vlâst, i na crvenōj zâstavi revolúcijē īma i nèkoliko njègovīh kâpi krvi.

N. Ostrovskij, *Kako se kalio čelik*.
Zagreb, 1945, str. 355

GROUP III: From M. Gor'kij, *Mat'*. Adapted from Trofymovyč, 1960.

CZECH

Za továrnou se rozkládal velký močál, porostlý jedlemi a břízami, který ji téměř obklopoval kruhem hniloby. V létě vydechoval močál husté, žluté výpary a do osady se z něho valily mraky komárů, rozsévající zimnici. Močál patřil továrně, a nový ředitel ho chtěl zužitkovat a proto si usmyslel, že jej vysuší a přitom bude dobývat rašelinu. Poukazoval dělníkům na to, že tímto opatřením celý kraj hodně ozdraví a že se pro všechny zlepší životní podmínky, a nařídil, aby byla dělníkům z každého rublu mzdy srážena kopejka na vysušení močalu.

Dělníci se počali bouřit. Zvláště je uráželo, že továrním úředníkům nová daň uložena nebyla.

Oné soboty, kdy byla vyvěšena ředitelova vyhláška o kopejkové srážce ze mzdy, byl Pavel nemocen; nepracoval a o ničem nevěděl. Druhého dne po obědě přišel k němu příjemný stařík, slevač Sizov a velký zlostný zámečník Machotin a vypravovali mu o ředitelově nařízení.

«My starší jsme se sešli», vykládal rozvážně Sizov, «promluvili jsme si o tom, a tak nás soudruzi poslali k tobě, abychom se tě otázali — protože jsi mezi námi nejzkušenější — zdali existuje takový zákon, který by řediteli dovoloval, aby za naše kopejky bojoval s komáry?»

«Jen si to představ!» řekl Machotin, blýskaje úzkýma očima. «Před čtyřmi lety vybírali ti zloději na lázně. Bylo sebráno tři tisíce osm set rublů. Kde jsou? Lázně — nejsou!»

(Maxim Gorkij, *Matka*. Přeložil Vlasta Borek. «Svoboda». Praha, 1951, pg. 57-58.)

SLOVAK

Za továrňou sa rozprestieralo veľké močarisko, zarastené jedľovým a brezovým hájikom, ktoré obkolesovalo továreň ako prehnitý prsteň. V lete dýchalo hustými, žltými výparmi a do kolónie lietaly z neho celé mračná komárov, čo roznášaly zimnicu. Močarisko patrilo továrni a nový riaditeľ chcel mať z neho osoh, nuž zmyslel si vysušiť ho a popritom vybrať z neho rašelinu. Presviedčal robotníkov, že toto podujatie ozdraví celé okolie a zlepší životné podmienky všetkých, a nariadil, aby im sťahovali z každého rubľa výplaty kopejku na vysušenie močariska.

Robotníci sa začali búriť. Najväčšmi ich urážalo, že úradníci nepodliehali novému poplatku.

Pavel bol chorý v tú sobotu, keď vyvesili riaditeľovu vyhlášku o zrážke kopejky. Nebol v robote a nič o tom nevedel. Na druhý deň, po predpoludňajších službách božích, prišiel k nemu príjemný starček, slievač Sizov, s vysokým a zlostným zámočníkom Machotinom a porozprávali mu o riaditeľovom nariadení.

— Sišli sme sa my, starší, — dôstojne rozprával Sizov, — popretriasali sme to a priatelia nás poslali k tebe, lebo si z nás najskúsenejší, aby sme sa ťa opýtali, či jesto taký zákon, ktorý by riaditeľovi dával právo bojovať proti komárom našimi kopejkami?

— Len si pomysli! — povedal Machotin a blýskal úzkymi očami. — Pred štyrmi rokmi tí zlodeji vyberali na kúpeľ. Sosbierali tritisíc osemsto rubľov. A kde sú? Kúpeľa niet!

(Maxim Gorkij, *Matka.* Preložila Dr. Maria Klimová. «Pravda», Bratislava 1952, pg. 65-6).

POLISH

Za fabryką, prawie okrążając ją zgniłym pierścieniem, ciągnęły się obszerne bagna, porosłe jedliną i brzozą. Latem oddychały gęstymi, żółtymi oparami i na osiedle leciały z nich chmury komarów siejąc gorączkę. Błota należały do fabryki i nowy dyrektor chcąc wyciągnąć z nich pożytek, postanowił je osuszyć, a przy sposobności wybrać torf. Wskazując robotnikom, że w ten sposób uzdrowi okolicę i polepszy warunki ich życia, wydał rozporządzenie, żeby odliczać z ich zarobków kopiejkę od każdego rubla na osuszenie błota.

Wśród robotników zawrzało. Najbardziej oburzało ich to, że urzędnicy fabryczni nie wchodzili w liczbę płatników nowego podatku.

W sobotę, kiedy wywieszono ogłoszenie dyrektora o ściąganiu kopiejki, Paweł był chory, nie pracował i nie wiedział nic o tym. Na drugi dzień, po mszy, przyszedł do niego starszy robotnik o szanownym wyglądzie, giser Sizow i wysoki i zły ślusarz Machotin i opowiedzieli mu o zarządzeniu dyrektora.

— Najstarsi z nas zebrali się — mówił z powagą Sizow — naradzili się i posłali nas do ciebie zapytać się, jako że jesteś człowiekiem, który dużo wie — czy jest takie prawo, żeby wolno było dyrektorowi naszymi kopiejkami z komarami wojować?

— Zważ tylko! — powiedział Machotin błyskając wąskimi oczyma. — Cztery lata temu na łaźnię, złodzieje, zbierali. Trzy tysiące osiemset rubli zebrano. A gdzie one są? Łaźni — nie ma!

M. Gorki, *Matka*. Tłumaczenie Haliny Górskiej. Państwowe Wydawnictwo Literatury Pięknej Litewskiej SSR, 1952, pg. 71.

UPPER LUSATIAN (SORBIAN)

Za twornju, nimale wobdawajo ju ze zhniłym kruhom, ćehnješe so wobšěrne bahno, porosćene ze šmrěkami a brězami. W lěću wuparješe husty, žołty dym a na předměsto z njeho lećachu mróčele kuntworow, rozšěrjejo zymnicu. Bahno šlušeše tworni, a nowy načolnik chcyjo jo zwužitkować zamysli so jo wusušić a wudobywać pochowinu. Wukładujo dźěłaćerjam, zo tuta naprawa wokolinu wustrowi a polěpši wuměnjenja žiwjenja za wšěch, načolnik měješe mysle z jich mzdy z rubla woćahnyć kopjejku na wusušenje bahna.

Dźěłaćerjo so rozhorichu. Wosebje jich rozhněwa, zo zastojnicy njetrjebachu płaćić nowy dawk.

Pawjeł běše chory tu sobotu, hdyž wuwěšachu wozjewjenje načolnika wo zběranju kopjejki. Wón njedźěłaše a ničo wo tym njewědźeše. Nazajtra wote mše k njemu přińdźeštaj dostojny starc, lijer Sizow, wysoki a złóstny zamkar Machotin a powědaštaj jemu wo wukazu načolnika.

«Zeńdźechmy so», rjekny měrnje Sizow, «rozmołwichmy so a pósłachu naju towaršojo k tebi so woprašeć, dokelž sy ty rozumny človjek, hač je tajki zakoń, zo smě načolnik z našimi kopjejkami wojować přećiwo kuntworam?»

«Pomysl sej!» rjekny Machotin, mikotajo z wuskimaj wočomaj. «Před štyrimi lětami tući wobšudźerjo na kupjele zběrachu. Tři tysacy wósom stow tehdy nazběrachu. Hdźe wone su? Kupjelow nimamy!»

Excerpt translated by M. Novak.
Nova Doba 1951, No. 69.

LOWER LUSATIAN (SORBIAN)

Skoro wobdawajucy fabriku z pognitym kołom, jo se za njeju šěgnuło šyroke, z jědłami a brjazami porosćone błoto. W lěšu su z njogo stupali guste, žołte spary a do psedměsta su z njogo leśeli mroki komarow, rozšyrjecy zymnicu. Błoto jo słušało fabrice, a nowy direktor jo kśěł z njogo wužytk měś. Won jo sebje wumyslił, je wusušyś a pśi tom z njogo wudobywaś smogoŕ. Pokazujucy źěłaśerjow na to, aż toś ta napšawa wustrowi město a polěpšy wuměnjenja žywjenja za wšyknych, jo direktor pśikazał, wotšěgnuś z jich myta kopejku na rubl za wusušenje błota.

Źěłaśerje su se rozgorili. Wosebnje jo jich goriło, aż pśistajone njesłušachu do tych, kenž płaśichu nowy dank.

Pawoł běšo sobotu chory, gaž su wupowjesyli wozjawjenje direktora wo

zběranju kopejki; won njejo źěłał a njejo nic wo tom wěźeł. Na drugi źeń stej k njomu po wobjeźe pśišłej dostojny stary cłowjek, lejaŕ Sizow, a wjeliki, zły zamkaŕ Machotin a stej jomu wulicowałej wo pśikazu direktora.

«My, kenž smy starše, smy se zejšli», jo Sizow dostojnje gronił, «smy popowědali wo tom; něnto su nas towariše posłali k tebje se wopšašaś — dokulaž sy ty wucony cłowjek — lěc wobstoj taka kazń, po kotarejž direktor smějo z našeju kopejku wojowaś pśeśiwo komaram?» — «Pśemysl sebje to!» jo gronił Machotin, błyskotajucy z wuskima wocyma. «Pśed styri lětami su toś te zedraki za kupjelu zběrali. Tśi tysace wosym stow jo se nazběrało. ... Źo ga woni su? Kupjele njamamy!»

Translated specially for Trofymovič
by H. Mučišk, teacher of Sorbian, Cottbus.

UKRAINIAN

За фабрикою, майже оточуючи її гнилим кільцем, тягнулося широке болото, поросле ялинником та березою. Влітку воно дихало густими, жовтими випарами, і на слобідку з нього летіли хмари комарів, сіючи пропасниці. Болото належало фабриці, і новий директор, бажаючи мати з нього вигоду, надумав осушити його, а до речі вибрати торф. Доводячи робітникам, що це оздоровить місцевість і поліпшить умови життя для всіх, директор розпорядився вираховувати з їхнього заробітку по копійці з карбованця на осушення болота.

Робітники захвилювалися. Особливо образило їх те, що службовці не входили в число платників нового податку.

Павло був хворий у суботу, коли вивісили оголошення директора про збір копійки; він не працював і не знав нічого про це. Другого дня, після обідні, до нього прийшов благообразний дідок, ливарник Сізов, високий і злий слюсар Махотін і розказали йому про рішення директора.

— Зібралися ми, котрі старші, — поважно говорив Сізов, — поговорили про це, і ось послали нас товариші до тебе спитатися — як ти у нас людина знаюча — чи є такий закон, щоб директорові нашою копійкою з комарами воювати?

— Зметкуй! — сказав Махотін, блискаючи вузенькими очима. — Чотири роки тому вони, жульмани, на баню збирали. Три тисячі вісімсот було зібрано. Де вони? Бані — нема!

М. Горький, *Мати*. Переклад С. Вараввн.
Держлітвидав, УРСР, К., 1940, стор. 51-52

RUSSIAN

За фабрикой, почти окружая ее гнилым кольцом, тянулось обширное болото, поросшее ельником и березой. Летом оно дышало густыми, желтыми испарениями и на слободку с него летели тучи комаров, сея лихорадки. Болото принадлежало фабрике, и новый директор, желая извлечь из него пользу, задумал осушить его, а кстати выбрать торф. Указывая рабочим, что эта мера оздоровит местность и улучшит условия жизни для всех, директор распорядился вычитать из их заработка копейку с рубля на осушение болота.

Рабочие заволновались. Особенно обидело их, что служащие не входили в число плательщиков нового налога.

Павел был болен в субботу, когда вывесили объявление директора о сборе копейки; он не работал и не знал ничего об этом. На другой день, после обедни, к нему пришел благообразный старик, литейщик Сизов, высокий и злой слесарь Махотин и рассказали ему о решении директора.

— Собрались мы, которые постарше, — степенно говорил Сизов, — поговорили об этом, и вот, послали нас товарищи к тебе спросить, — как ты у нас человек знающий, — есть такой закон, чтобы директору нашей копейкой с комарами воевать?

— Сообрази! — сказал Махотин, сверкая узкими глазами. — Четыре года тому назад они, жулье, на баню собирали. Три тысячи восемьсот было собрано. Где они? Бани — нет!

Б. Горький, *Мать*. Гослитиздат, М.—Л., 1951, pg. 49

BELORUSSIAN

За фабрыкай, амаль абкружаючы яе гнілым кальцом, цягнулася шырокае балота, якое парасло ельнікам і бярэзнікам. Улетку яно дыхала густымі, жоўтымі выпарэннямі, і на слабодку з яго ляцелі хмары камароў, сеючы ліхаманку. Балота належала фабрыцы, і новы дырэктар, жадаючы атрымаць з яго якую-небудзь карысць, надумаў асушыць яго, тым часам выбраць торф. Указваючы рабочым, што гэтае мерапрыемства аздаровіць мясцовасць і палепшыць умовы жыцця для ўсіх, дырэктар загадаў вылічаць з іхняга заробку капейку з рубля на асушку балота.

Рабочыя пачалі хвалявацца. Асабліва пакрыўдзіла іх, што служачыя не ўваходзілі ў лік плацельшчыкаў новага падатку.

Павел быў хворы ў суботу, калі вывесілі аб'яву дырэктара пра збор капейкі; ён не працаваў і не ведаў нічога пра гэта. На другі дзень, пасля абедні, да яго прышоў паважнага выгляду стары ліцейшчык Сізаў, высокі і злосны слёсар Махоцін і расказалі яму пра дырэктараву пастанову.

— Сабраліся мы, якія пастарэй, — паважна гаварыў Сізаў, — пагава-

рылі пра гэта, і вось паслалі нас таварышы да цябе запытацца — як ты ў нас чалавек дасведчаны, — ці ёсць такі закон, каб дырэктару нашай капейкай з камарамі ваяваць?

— Памяркуй! — сказаў Махоцін, бліскаючы вузкімі вачыма. — Чатыры гады таму назад яны, жулікі, на лазню збіралі. Тры тысячы восемсот было сабрана. Дзе яны? Лазні — няма!

М. Горкі, *Маці.* Дзяржаўнае выдавецтва пры СНК БССР. Рэдакцыя мастацкай літаратуры, Мінск, 1941, pg. 46.

BULGARIAN

Зад фабриката се разстилаше обширно блато, обрасло с дребни елхи и брези, което почти я обгръщаше в обръч от миризми на изгнило. Лятно време то изпускаше гъсти жълти изпарения и в квартала прелитаха от него облаци комари и разнасяха треска. Блатото принадлежеше на фабриката и новият директор, който искаше да извлече от него полза, намисли да го изсуши и да изкара от него торф. Като сочеше на работниците, че тази мярка ще оздрави местността и ще подобри жизнените условия за всички, директорът се разпореди да отбият от заплатата им по една копейка на рубля за изсушаване на блатото.

Работниците се развълнуваха. Те особено се обидиха, загдето чиновниците във фабриката не влизаха в числото на тези, които трябваше да платят новия данък.

Павел беше болен в събота, когато разлепиха обявлението на директора за събиране на копейката. Той не работеше и нищо не знаеше за това. На другия ден след утринната литургия при него дойдоха благообразният старец — леярят Сизов и високият и зъл шлосер Махотин и му разправиха за решението на директора.

— Ние, по-старите, се събрахме, — важно говореше Сизов, — поприказвахме за това и другарите ни пратиха при тебе да те питаме, като учен човек, има ли такъв закон, според който директорът може да се бори против комарите с нашата копейка.

— Помисли си само! — каза Махотин и тесните му очи святкаха. — Преди четири години те, вагабонтите, събираха пари за баня. Три хиляди и осемстотин събраха. А де дянаха парите? Баня няма.

М. Горки, *Майка.* Перевел Стоян Каролев. Издателство на българската комунистическата партия. София, 1949, pg. 59-60.

SLOVENE

Za tovarno se je razprostiralo veliko, z jelovjem in brezjem poraščeno močvirje, ki jo je obdajalo kakor gnil obroč. Poleti so puhtele iz njega goste rumene pare, in na predmestje so se usipali z njega oblaki komarjev in sejali

mrzlico. Močvirje je bilo last tovarne in novi ravnatelj ga je hotel izrabiti s tem, da bi ga osušil in dobival iz njega šoto. Sklicujoč se na to, da bo ta ukrep ozdravil ves kraj in vsem zboljšal življenjske pogoje, je ravnatelj odločil, naj utrgajo delavcem od vsakega zasluženega rublja po eno kopejko za osušitev močvirja.

Med delavci je zahrumelo. Posebno se jim je zamerilo to, da uradniki niso bili všteti med plačevalce novega davka.

Pavel je bil v soboto bolan, ko so nabili ravnateljev razglas o pobiranju kopejke; ker ni delal, tudi ni nič vedel o tem. Drugi dan po maši sta prišla k njemu častitljiv starec, livar Sizov, in visoki, togotljivi ključavničar Mahotin ter mu povedala o ravnateljevem odloku.

«Zbrali smo se, kar nas je starejših», je počasi govoril Sizov; «pogovorili smo se o tem, in tovariši so naju poslali k tebi, ki si pameten človek in več kako in kaj, da te vprašava: ali je taka postava, da bi se smel ravnatelj z našo kopejko vojskovati zoper komarje?»

«Premisli!» je rekel Mahotin, bliskaje z ozkimi očmi. «Pred štirimi leti so lopovi zbirali za kopališče. Tri tisoč osem sto je bilo nabranega... Kje je ta denar? Kopališča ni!»

M. Gorki, *Mati.* Prevedel Vladimir Levstik.
«Mladinska knjiga». Ljubljana, 1957, pg. 65

MACEDONIAN

Зад фабриката, оградувајќи ја скоро од сите страни како со некаков гнил прстен, се простираше просторно мочуриште обраснато со ели и брези. Лете од мочуриштето се креваше задушливо, жолто испарение, и од него во предградието долетуваа облаци комарци и сееја треска. Мочуриштето и припаѓаше на фабриката и новиот директор, сакајќи да го искористи, намисли да го исуши, и покрај другото да го извади и тресетот. Уверувајќи ги работниците дека таа мерка ќе ја подобри здравствената состојба на местото и дека ќе ги поправи условите за живот на сите, директорот нареди од секоја рубља на нивната заработувачка да се одзема по една копејка за исушување на мочуриштето.

Работниците се узбунија. Особено ги лутеше тоа што во бројот на оние кои го плаќаа новиот данок не влегоа чиновниците.

Павле беше болен во саботата кога ја истакнаа директоровата објава за одбивањето по копејка; не работеше и ништо не знаеше за тоа. Утредента, по службата божија, му дојде едно пристојно старче, леарот Сизов, високиот и налутен бравар Махотин и го известија за директоровото решение.

— Се собравме ние постарите, — важно зборуваше Сизов — поразговаравме за тоа, и ете не пратија другарите тебе да те прашаме — оти меѓу нас ти си познат како човек кој има знаење — дали е по законот тоа директорот со нашите копејки да се бори против комарците?

Максим Горки, *Мајка.* Перевел Мето Јовановски.
«Култура», Скопје 1957, pg. 73-74

SERBO-CROATIAN

Serbian Variant

Иза фабрике, ограђујући је готово са свих страна као какав прстен, протезала се пространа баруштина, у којој су израсле јеле и брезе. Лети су се с баруштине дизала загушљива, жута испарења, и у предграђе су с ње долетали облаци комараца, који су сејали грозницу. Баруштина је припадала фабрици, и нови директор је, у жељи да је искористи, намислио да је исуши, а у исто време и да извади тресет из ње. Уверавајући раднике да ће се том мером побољшати здравствено стање места и животне прилике за све, директор је наредио да се од сваке рубље њихове зараде одузима по једна копејка за исушење мочваре.

Радници су се ускомешали. Нарочито их је вредало то што чиновници нису ушли у број оних који плаћају нови порез.

Павле је био болестан у суботу, кад су истакли директорову објаву о одбијању копејке; он није радио и није ништа знао о томе. Сутрадан, после службе божје, дође му уљудан старчић, ливац Сизов, и високи, љутити бравар Махотин, и известише га о директоровој одлуци.

— Окупили смо се ми старији, — озбиљно рече Сизов, — поразговарали смо о томе, и ето, послали су нас другови да упитамо тебе — пошто си ти међу нама човек који има знања — да ли је по закону да се директор нашим копејками бори против комараца?

— Помисли само! — рече Махотин севајући уским очима. — Пречетири године они су, ниткови, скупљали за купатило. Три хиљаде и осам стотина је скупљено. А где су? Купатила — нема.

М. Горки, *Мати*. Превод у редакцији Марка Видајковића. Београд—Загреб, 1948, pg. 65

Croatian Variant

Iza tvornice ograđujući je gotovo sa svih strana, kao kakav truo prsten, protezala se prostrana baruština obrasla jelama i brezama. Ljeti se s baruštine dizala zagušljiva, žuta isparenja, i na predgrađe su s nje dolijetali oblaci komaraca i sijali groznicu. Baruština je pripadala tvornici, i novi direktor je, želeći da je iskoristi, namislio da je isuši, a u svoje vrijeme i da povadi treset. Uvjeravajući radnike, da će ta mjera poboljšati zdravstveno stanje mjesta i popraviti uslove života za sve, direktor je naredio, da se od svakog rublja njihove zarade oduzme po jedna kopejka za isušenje močvare.

Radnici su se uzbunili. Naročito ih je ljutilo što činovnici nisu ušli u broj onih, koji plaćaju novi porez.

Pavle je bio bolestan u subotu, kada su istakli direktorovu objavu o odbijanju kopejke; nije radio i nije ništa znao o tome. Sutradan, poslije službe božje, došao mu uljudni starčić, ljevač Sizov, visoki i ljutiti bravar Mahotin i izvijestili ga o direktorovoj odluci.

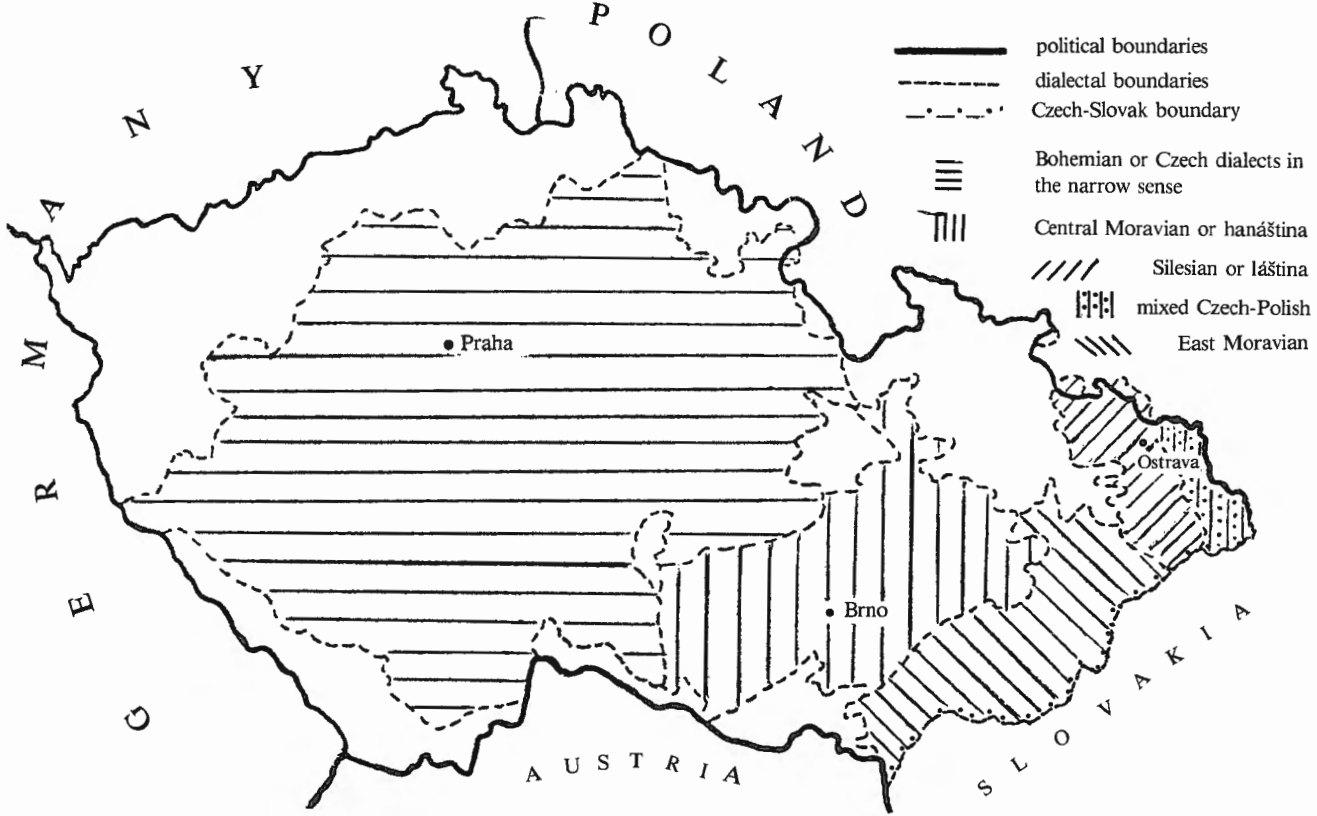
— Skupili smo se mi postariji — razložno je govorio Sizov — porazgovorili o tome, i eto poslali nas drugovi da tebe upitamo — jer si ti među nama poznat kao čovjek, koji ima znanja — je li to po zakonu, da se direktor našim kopejkama bori protiv komaraca?

— Pomisli samo! — reče Mahotin sijevajući uskim očima. — Prije četiri godine oni su, nitkovi, skupljali za kupatilo. Tri tisuće hiljade i osam stotina su skupili. Gdje su pare? A od kupatila ni spomena.

M. Gorki, *Mati.* «Glas rada».
Zagreb, 1950, pg. 60

Dialect Maps

The Czech Speaking Area of Czechoslovakia

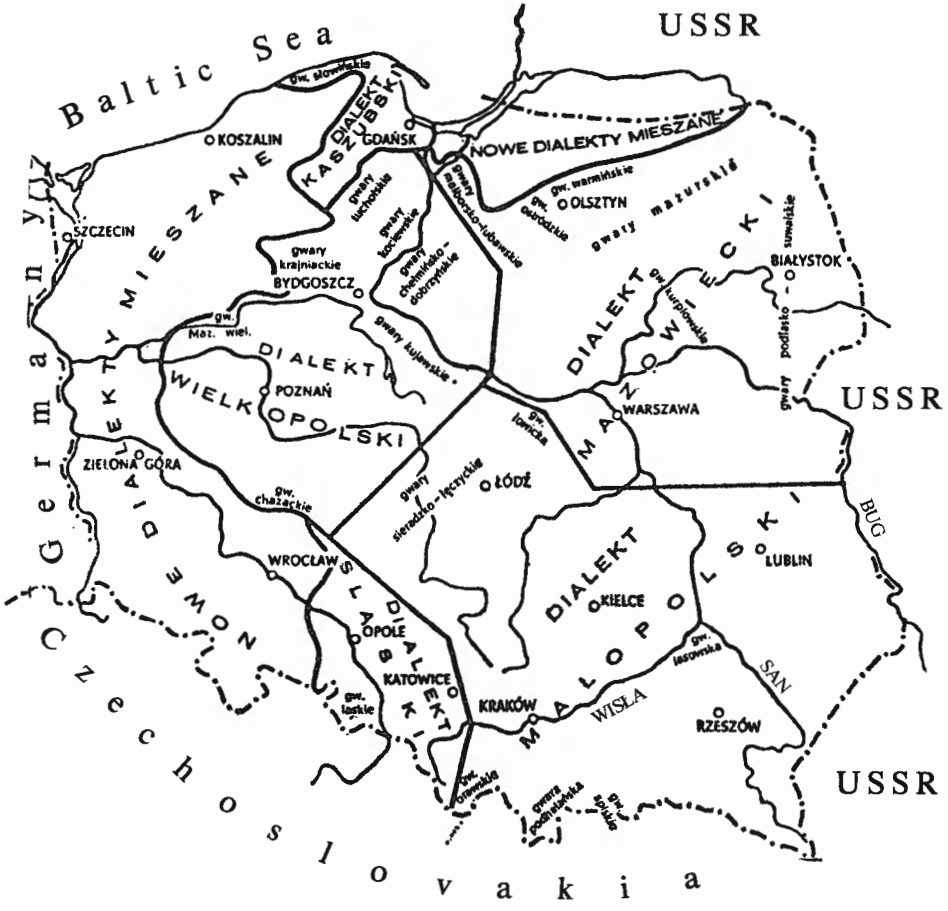


The blank (or white) areas are newly settled by Czech speakers from various regions and, therefore, do not constitute a definite dialectical type. Until after World War II these areas were German speaking.

The Slovak Speaking Area of Czechoslovakia

Shaded: Ukrainian Lemko and Transcarpathian dialects *Horizontal lines:* Hungarian speaking area *Black dots:* Polish Góral dialects

The Dialects of Polish (Schematic Division)

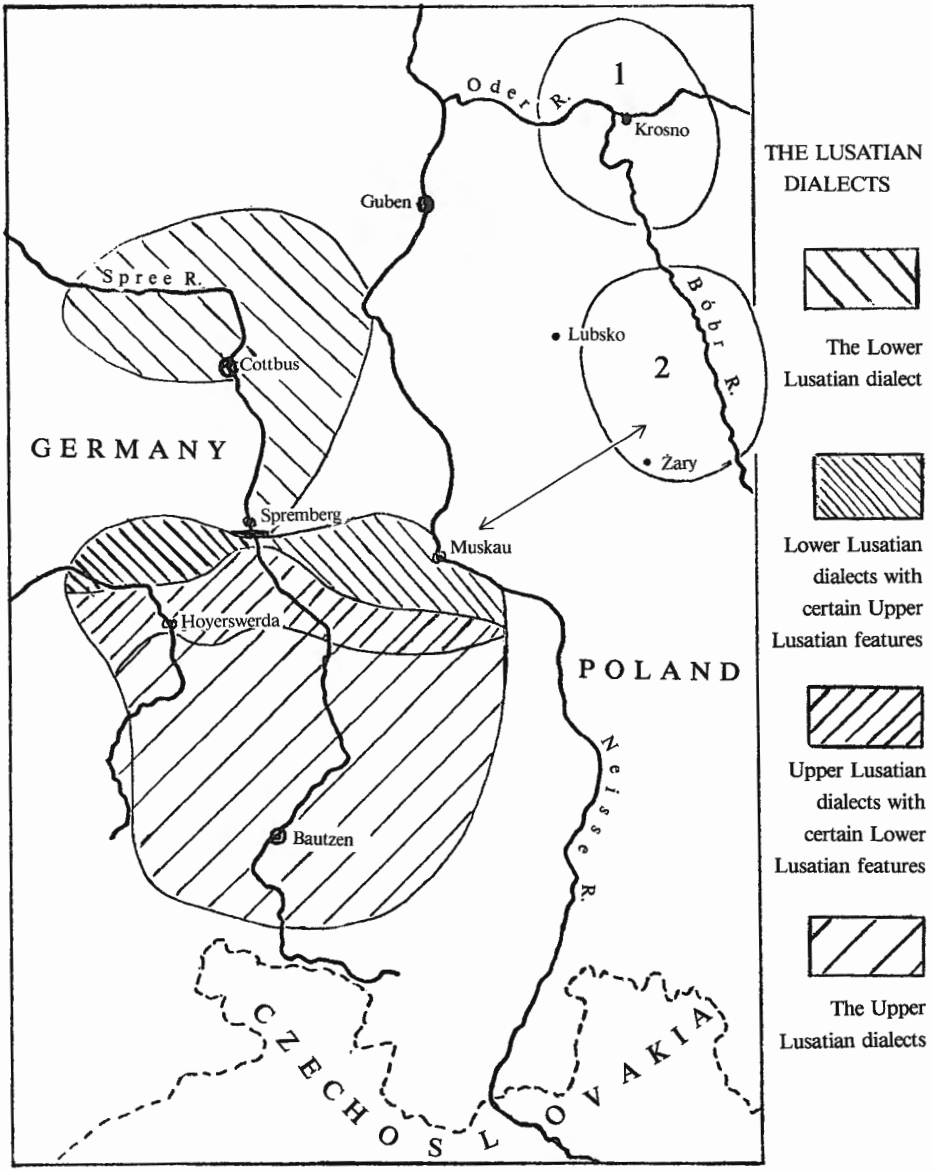


The major dialectal divisions of Polish are Great Poland *(wielkopolski)*, Little Poland *(małopolski)*, Mazovian *(mazowiecki)*, Silesian *(śląski)* and Kashubian *(kaszubski)*. Within each of these major dialects exist smaller local variants or subdialects referred to as *gwary* in Polish. The New Mixed Dialects *(nowe dialekty mieszane)* arose after 1945 when Polish speakers from all dialectal regions settled the territory previously inhabited by Germans.

—•—•—•— national boundaries

——— dialect boundaries

The Lusatian Speaking Area



Areas 1 and 2 in Poland represent the approximate territory from which we have documents in extinct forms of Lower Lusatian (No. 1 — *Megiser's Dictionary;* No. 2 — *Jakubica's New Testament*). The entire area from the Neisse south of Muskau to somewhat east of the Bóbr and somewhat north of the Oder was all Lower Lusatian speaking.

The interesting thing to note is how extremely small the present Lusatian speaking territory is. From north to south it is less than 100 km and only some 60 km at its widest points.

Remember also that the closeness of Czech and Polish speaking is a relatively recent development.

The Ukrainian Dialects (Western Regions)

THE SOUTHWESTERN GROUP:

1. Lemko
2. Transcarpathian
3. Boyko
4. Hucul
5. Pokutt'a-Bukovyna
6. S'an R. dialect
7. Dniester R. dialect
8. South Volhynian
9. Podillian
10. Buh R. dialect

THE NORTHERN or POLISSIAN

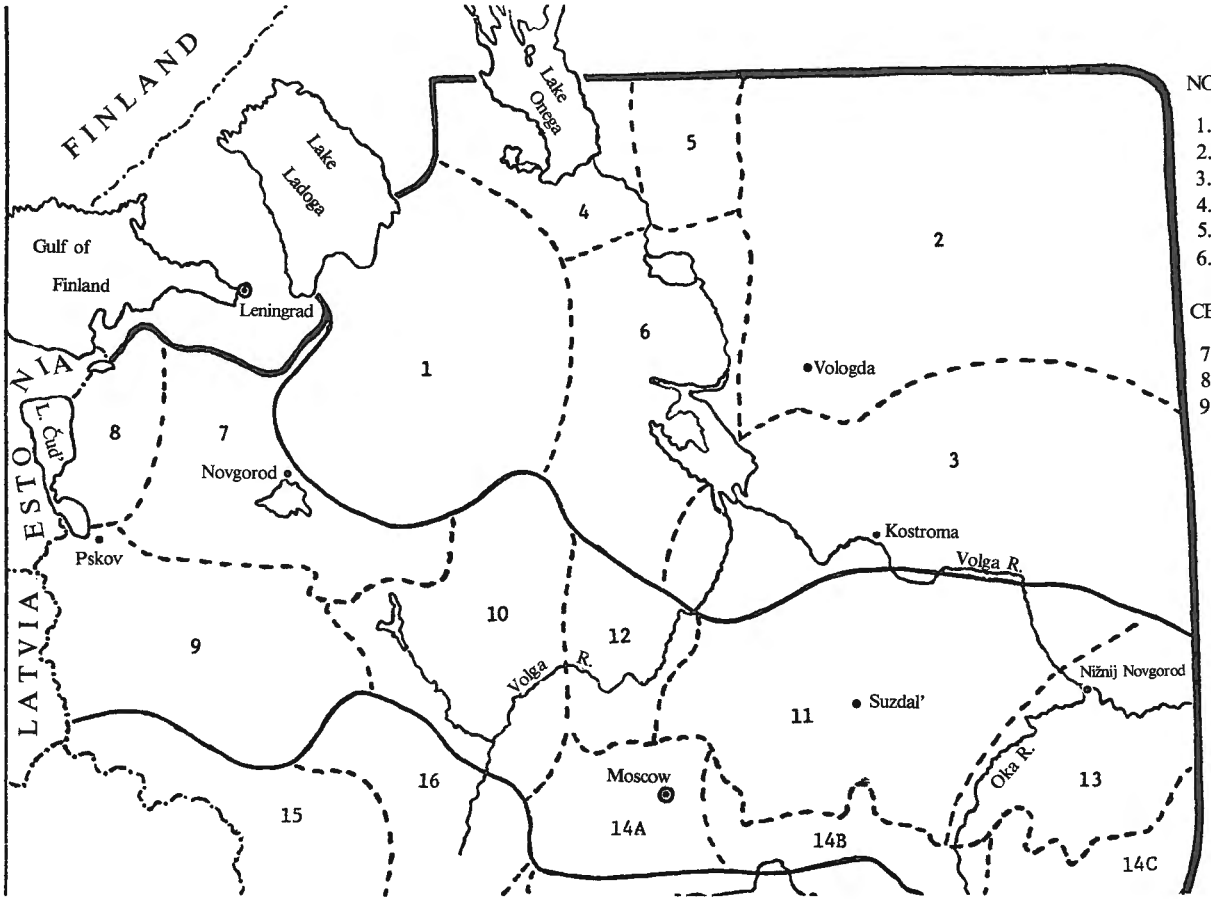
11. West Polissian
12. Central Polissian or Right Bank
13. Transitional between No. 11 and South-West Belorussian
14. East Polissian or Left Bank

The Ukrainian Dialects (Eastern Regions)

THE SOUTHEASTERN GROUP:

15. Steppe dialect
16. Mid Dnipro
17. Poltava-Slobožan

The Russian Dialects — Northern Portion



NORTH RUSSIAN

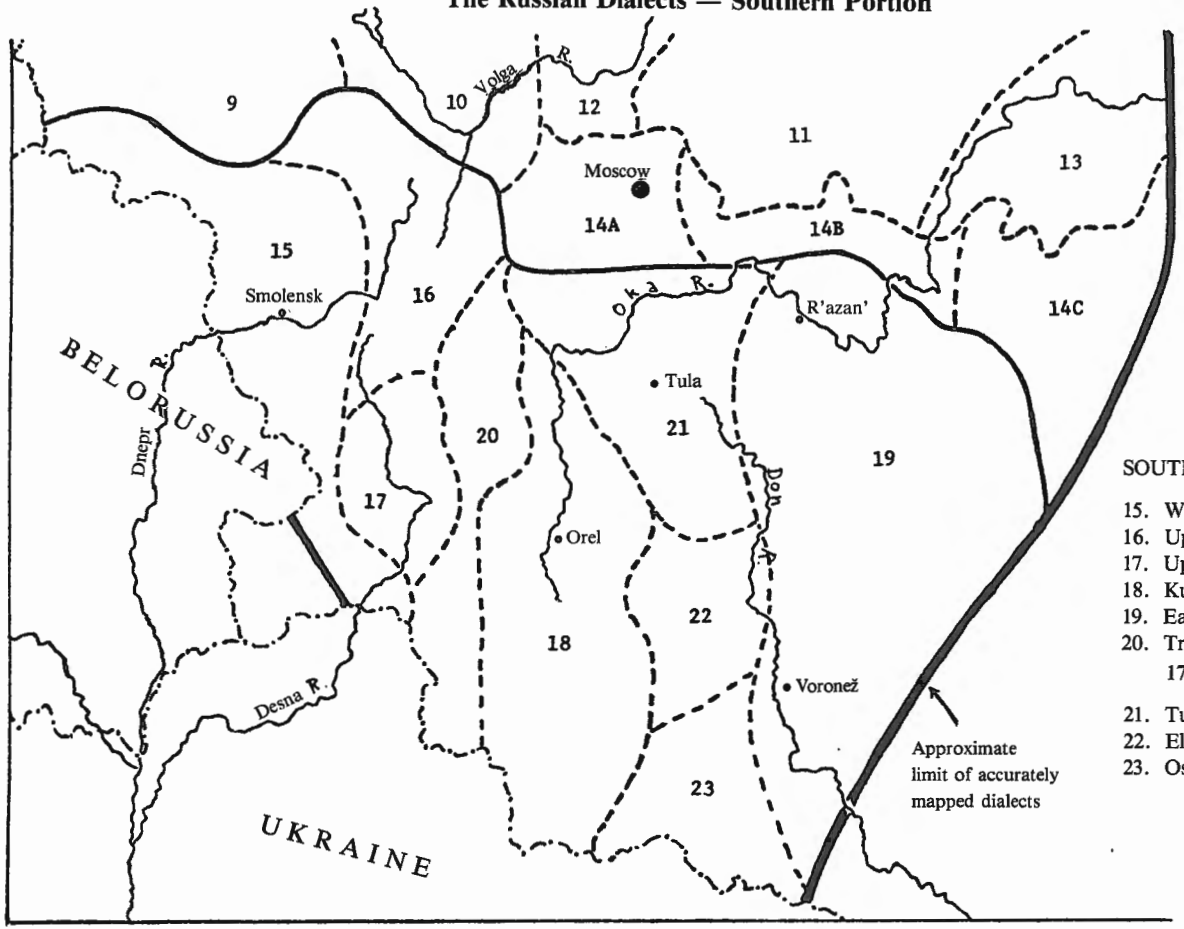
1. Ladoga-Tixvin
2. Vologda
3. Kostroma
4. Onega
5. Lake Lača
6. White Lake-Beleck

CENTRAL

7. Novgorod
8. Gdov
9. Pskov
10. Seliger-Toržok
11. Vladimir-Volga
12. Kalinin subgroup of no. 11
13. Gor'kij subgroup of No. 11

14A-C. Central-Eastern akan'e

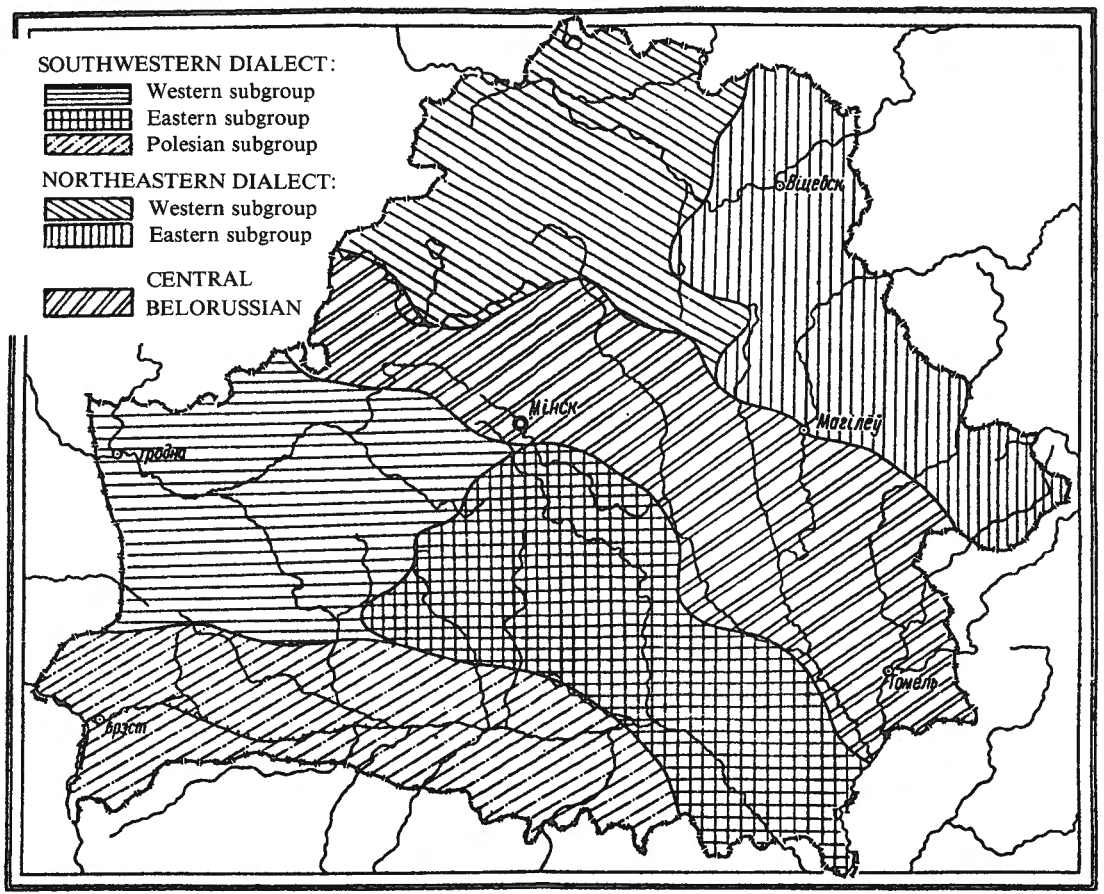
The Russian Dialects — Southern Portion



SOUTH RUSSIAN

15. Western
16. Upper Dnepr
17. Upper Desna
18. Kursk-Orel
19. Eastern or R'azan'
20. Transitional between Nos. 17 and 18
21. Tula
22. Elec
23. Oskol

The Belorussian Dialects



The Bulgarian Dialects

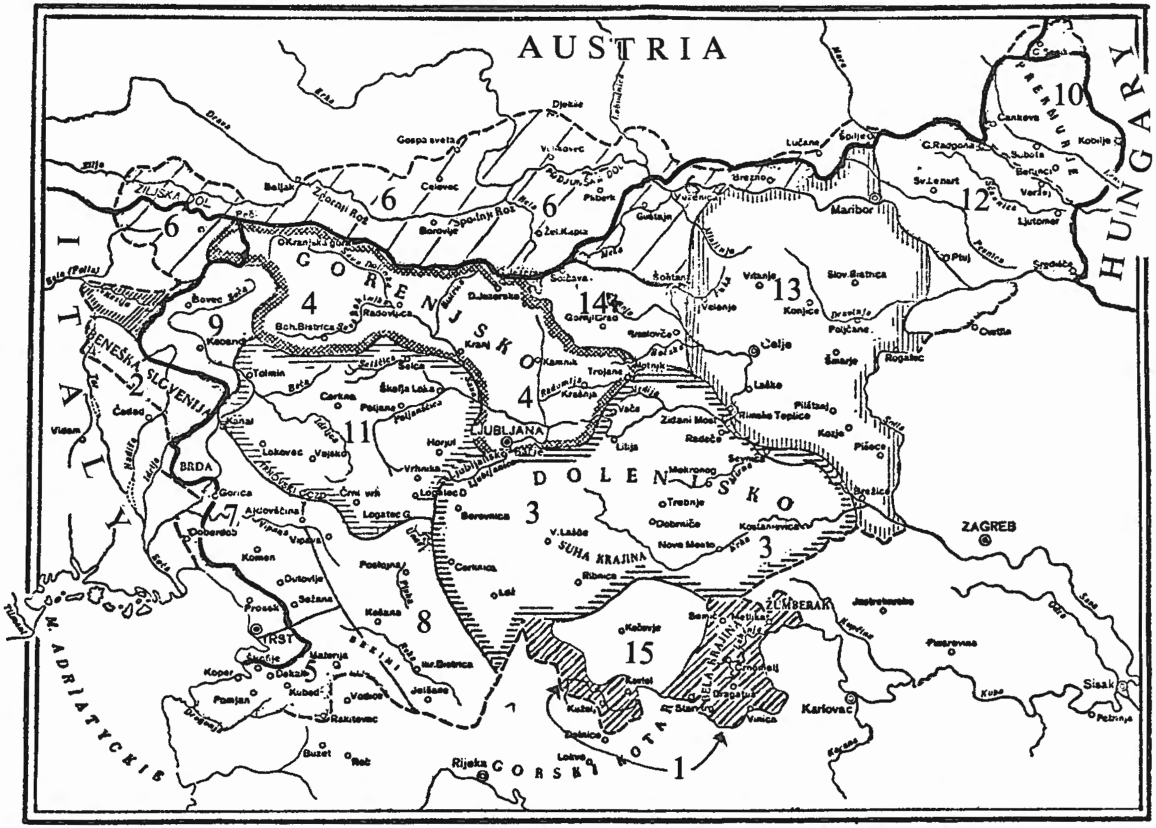
WESTERN GROUP

1. Northwest
2. Southwest
3. Transitional to SC Torlak dialect

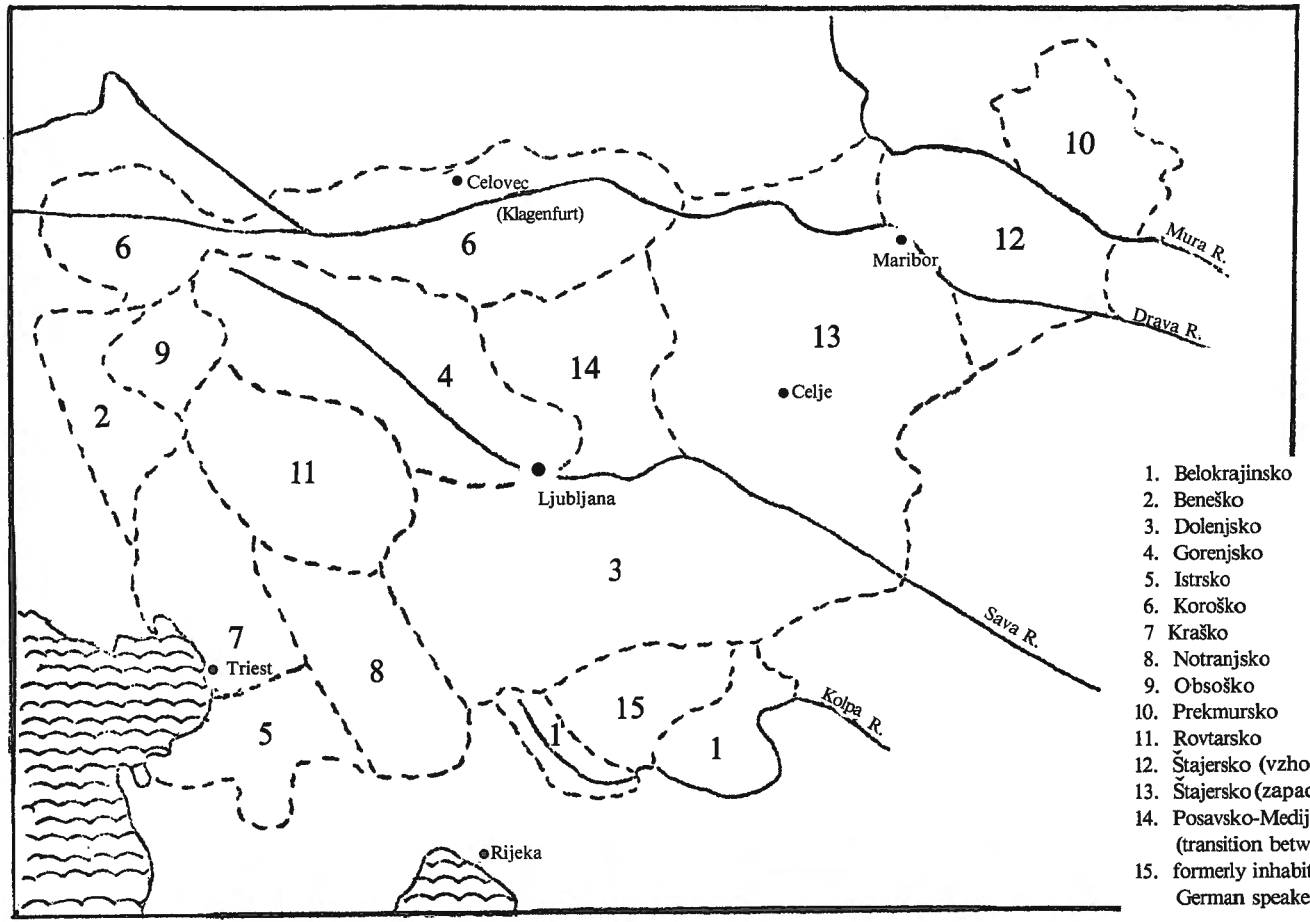
EASTERN GROUP

4. Moesian
5. Balkan
6. Rhodopian

The Slovene Dialects of Jugoslavia and Neighboring Countries

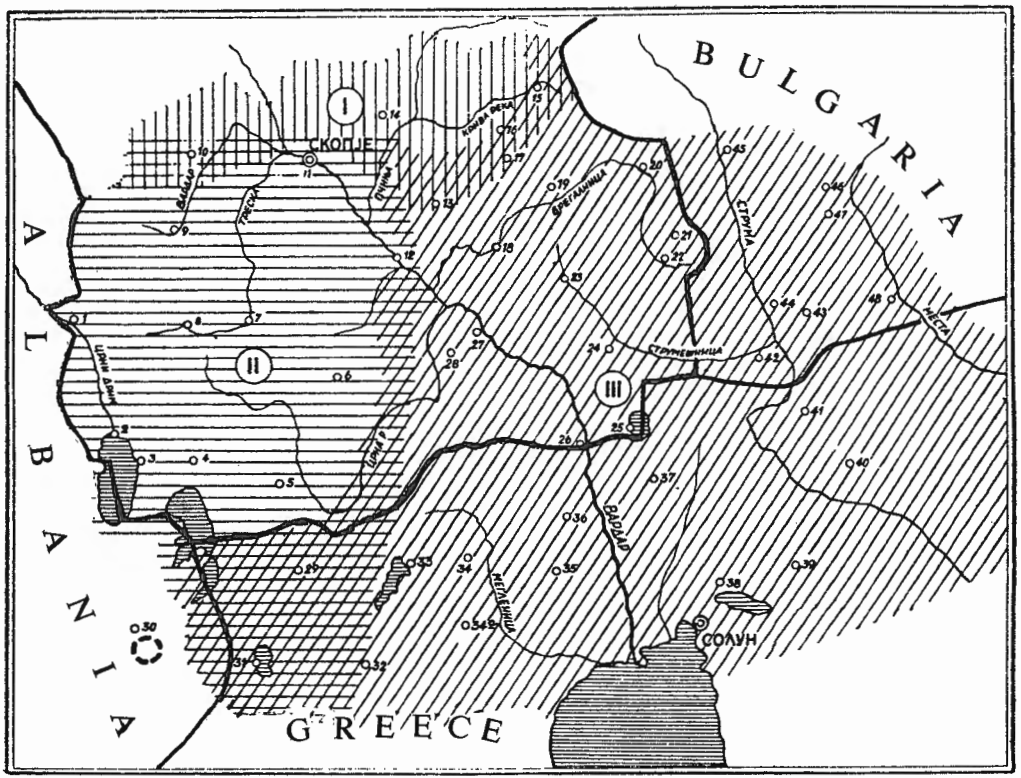


The Slovene Dialects, a Simplified Version of the Map Above



1. Belokrajinsko
2. Beneško
3. Dolenjsko
4. Gorenjsko
5. Istrsko
6. Koroško
7. Kraško
8. Notranjsko
9. Obsoško
10. Prekmursko
11. Rovtarsko
12. Štajersko (vzhodno)
13. Štajersko (zapadno)
14. Posavsko-Medijsko (transition between 4-6-13)
15. formerly inhabited by German speakers

The Macedonian Dialects



(Explanation of the map — see next page.)

THE PLACE-NAMES ARE INDICATED BY MEANS OF NUMBERS AS FOLLOWS:
1. Дебар, 2. Струга, 3. Охрид,
4. Ресен, 5. Битола, 6. Прилеп,
7. Македонски Брод, 8. Кичево,
9. Гостивар, 10. Тетово, 11. Скопје,
12. Велес, 13. Свети Николе,
14. Куманово, 15. Крива Паланка,
16. Кратово, 17. Злетово,
18. Штип, 19. Кочани,
20. Делчево, 21. Пехчево,
22. Берово, 23. Радовиш,
24. Струмица, 25. Дојран,
26. Гевгелија, 27. Неготино,
28. Кавадарци, 29. Лерин,
30. Корча, 31. Костур, 32. Кајлар,
33. Острово, 34. Воден,
34а. Негуш, 35. Пазар,
36. Гуменце, 37. Кукуш,
38. Лагадина, 39. Сухо,
40. Серез, 41. Валовиште,
42. Петрич, 43. Мелник,
44. Св. Врач, 45. Г. Џумаја (Благоевград), 46. Разлог,
47. Банско, 48. Неврокоп.

Adapted from B. Vidoeski (1962-3). "Makedonskite dijalekti vo svetlinata na linguističkata geografija". *Makedonski jazik,* XIII - XIV, pp. 86-107.

THE THREE MAJOR GROUPS ARE:

I. The Northern marked in vertical lines;
II. The Western marked in horizontal lines;
III. The Eastern marked in slanted lines

The areas where the various lines intersect, naturally enough, are transitional dialects as between I and II south and west of Skopje or between II and III in northwestern Greece around Lerin (29) and Kostur (31).

Regarding Macedonian presumably spoken in Greece, a word of caution is necessary. For a variety of complicated reasons — political, historical and cultural, it is very difficult to gather accurate statistics about these speakers. They have for generations been subject to intense Greek influence, and many have been assimilated both culturally and linguistically. The map, however, would give the impression that this area of Greece is still inhabited by a solid mass of Macedonian speakers. This would be an insubstantiated conclusion. Rather we should take the map to indicate merely that in so far as Macedonian is still spoken in northwestern Greece, it can be safely assigned to the dialectal groups as shown.

On the other hand, there is no doubt that we do have a solid mass of Slavic speakers over the border in Bulgaria. The question here is how to define their dialect — as Eastern Macedonian or Southwestern Bulgarian. Since the Bulgarians regard all of Macedonian as merely a southwestern dialect of Bulgarian, they would be quite willing, at least, in this one instance to agree with Macedonian scholars who assign the language spoken on both sides of the border to the same dialect.

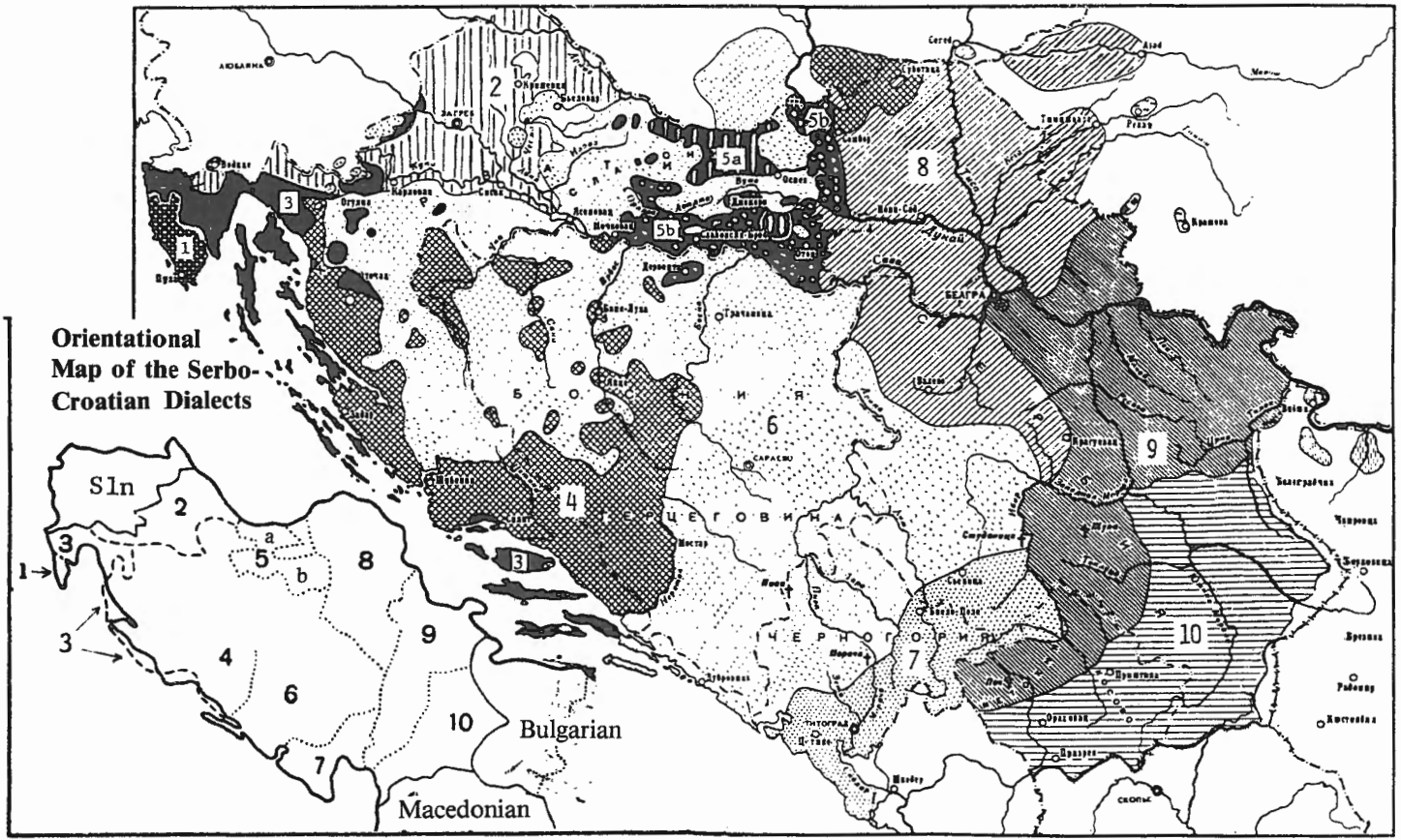
SE Macedonian dialect from the area of Edessa (Voden No. 34), N Greece, written in Greek script

(A passage from the Gospel of St. John, 20: 19-20 published in Saloniki, 1852. SOURCE: L. Moszyński, 1984, p. 25-6.)

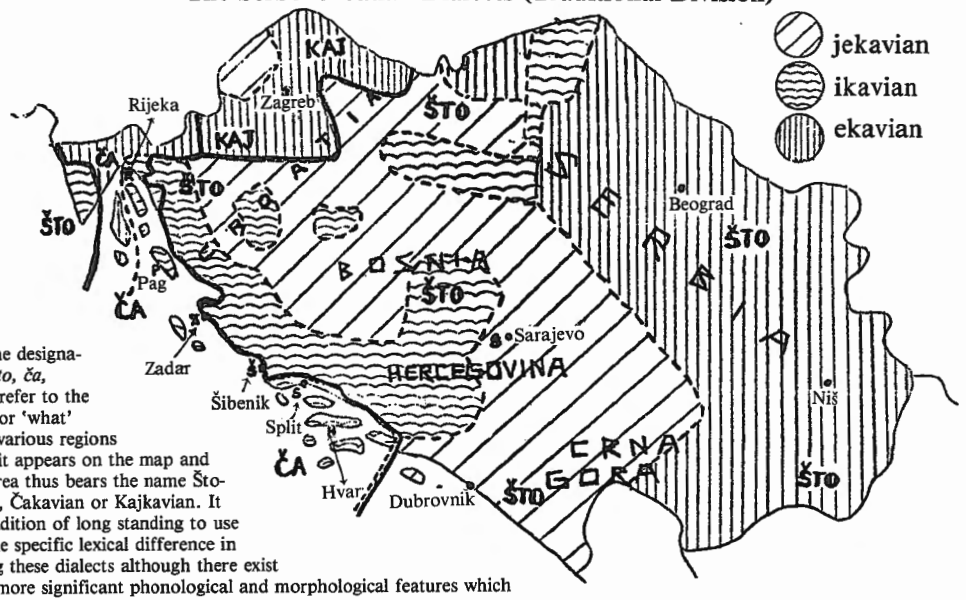
ORIGINAL TEXT	CYRILLIC TRANSCRIPTION
Μπεσε δότζκαναν νὰ	Беше дóцкана на
τόα δὲν πράβνιουτ	тóа ден, пръвниут
οὐτ σέδμητζατα,	ут сéдмицата,
ἡ μπέα βραττητε	и бéа врáтите
ζατφορένη, τάμου	затфорéни, тáму
δέκαθμπέα οὐτζενή-	дéка бéа ученú-
τζοτε σωμπράνη	ците собрáни
ζαρδὶ στράχουτ Ἰου-	зардú стрáхут ю-
δαΐτζκη, δουϊδὲ	дéйцки, дуйдé
Ἰησοῦς, ἡ ζαστανὰ ποῦ	Иисýс и застанá пý
σρέδε, ἡ βέλε νὰ νῆχ;	срéде и вéле на них:
μῆρ νὰ βᾶς. Ἡ κὰ	мир на вас! И кá
καζὰ βάα λακαρδία,	кáза вóа лакардúа,
μοῦ ποκαζὰ ρά-	мý пуказá ръ-
τζετέ μου ἡ ρεμπ-	ците му и реб-
ρουτό μου, ἡ οὐτζε-	руто му. И уче-
νήτζοτε σὰ ζαρα-	ни́ците сá зара-
δουβάα κὰ βεζδωα.	дувáа, кá ви́доа
Γόσπουδα.	Гóспуда.

Detailed Dialect Map of Serbo-Croatian

Adapted from R. V. Bulatova (1975). *Staroserbskaja glagol'naja akcentuacija*, Moscow. Therefore, all placenames are in Russian.



The Serbo-Croatian Dialects (Traditional Division)



THE ŠTOKAVIAN DIALECTS:

1. Istrian Ikavian
4. Newer or younger Ikavian
5a. Slavonian Ekavian
5b. Slavonian Ikavian
6. East Hercegovinian
7. Zeta-Lovčen or Montenegrian
8. Šumadija-Vojvodina
9. Kosovo-Resava
10. Torlak or Prizren-Timok

THE KAJKAVIAN DIALECTS: 2

THE ČAKAVIAN DIALECTS: 3

Dialect 8, 9, 10 are all Ekavian; 6 and 7 — Jekavian.

It is impossible to draw a boundary between 4 and 6 in a simplified map of this type. Area 4 is concentrated along the coast but there are islands of it in 6, all throughout western Štokavian.

The designations *što, ča,* or *kaj* refer to the word for 'what' in the various regions where it appears on the map and each area thus bears the name Štokavian, Čakavian or Kajkavian. It is a tradition of long standing to use this one specific lexical difference in naming these dialects although there exist many more significant phonological and morphological features which separate them.

The terms *Jekavian, Ekavian, Ikavian* refer to the reflexes of PSl **ě,* as explained on pg. 321. Since long **ě* > *ije* in *Jekavian,* these dialects are sometimes referred to as Ijekavian but this term is not common. Only some isolated dialectal islands of SC in Rumania remain *ě,* a distinct phoneme merging with neither *e* nor *i,* nor developing to *je.* Modern literary SC is based on a Štokavian dialect (No. 6) and may be written in either its Ekavian (Cyrillic) or Jekavian (Latin) form. See pg. 325 for more details.

As readily seen from the map, the vast majority of SC territory is designated as Štokavian and this large area itself contains many dialectal divisions other than these caused by the differing reflexes of *ě.* Largely for historical reasons (westward migrations by refugees fleeing the Turks), it is too intricate to map with clarity. Notice the islands of area 4 scattered throughout the western regions of area 6 and the large patch of 4 to the northwest of 8. Notice also the scattered nature of area 6 itself. There are islands of it in the midst of and west of Kajkavian (No. 2). It divides areas 5a and 5b and spills over into Hungary. Note also there two small islands of it in 5b, and 5b itself occurs in two clumps — one north of the Sava; the other, along the Danube.

Glossaries of the Slavic Words Used Throughout the Text

(Arranged language by language in the same order as discussed in Chapter IX)

CZECH

anděl angel
baba effeminate man, coward
bába old lady, granny
báseň verse, poetry
básník poet, bard
batoh backpack
bera while taking (adv. participle from *brátí** — masc. sing. form)
běhati to run
běliti to make white, whiten
běs devil, evil spirit
biješ 2nd pers. sing. of *bíti*
bil 3rd pers. sing. masc. past of *bíti*
bílý white, clean (nom. sing. masc.)
biřmovati to confirm
bíti to beat, hit
bob broad bean
boj battle, combat
bol pain
bor primeval forest
brada chin, beard
brániti to defend, protect
brloh den
brněti to tingle (as when an arm or leg becomes numb), buzz
brva eyelash
brvitý with eye brows (arch.)
břeh bank (of river)
břehu gen. sing. of *břeh*
březích loc. plural of *břeh*
břicho belly
břiše loc. sing. of *břicho*
bříza birch
Bůh God
byl 3rd pers. sing. masc. of *býti*
býk ox, bull
býti to be

celý whole
cesta road, way
cizí foreign, unknown
cítiti to sense, feel, smell
čas time
čeled' retinue
černý black (nom. sing. masc.)
čerpati draw (water), gather (data)
čistý clean (nom. sing. masc.)
číše large cup, goblet, chalice
článek article
člen member
člun boat

dar gift
datel woodpecker
dáti to give
dej 2nd pers. sing. imperative of *dáti*
den day
deset ten
deseti gen. of *deset*
desiti same as *desíti*
desíti alternative form for *deseti*
devátý ninth (nom. sing. masc.)
devět nine
devíti gen. sing. of *devět*
děd old man, grandfather
děj action, event, happening
děl gen. plur. of *dílo*
dělají 3rd pers. plur. of *dělati*
dělati to work, do
děláš 2nd pers. sing. of *dělati*
dělej 2nd pers. sing. imperative of *dělati*
dělník workman, worker
divný peculiar, odd
dílo work
díra hole
dítě child, baby

* Standard literary Czech allows two forms for every infinitive, either *-ti* (older) or *-t*.

díti to say, inform
díti se to act (older Cz); to happen, take place
dívati se to look at
dláto chisel
dlouhý long (nom. sing. masc.)
dlužník debtor
dlužný owing, obliged, in debt
dobrého gen. sing. masc. and neuter of *dobrý*
dobrému dat. sing. masc. and neuter of *dobrý*
dobrý, -a, -e good (nom. sing.)
doznání acknowledgement
dožinky harvest festival
dráha trail, track, now refers to railway
drahý dear; expensive
drazí nom. plural of *drahý*
dub oak
důl pit
duše soul
duší instr. sing. of *duše*
dům building
dvůr yard; court
dým smoke

had snake, serpent
háj grove
hezcí nom. plural of *hezký*
hezký beautiful, handsome
hltati to gulp, swallow
hluchý deaf
hluší nom. plural of *hluchý*
hněv anger
hnůj manure, dung
holý bare, naked
hora mountain
horách loc. plural of *hora*
hosté guests (nom. plural)
houba mushroom
hra play, game
hrabě rake
hrad castle, fortress
hranice border
hrachu gen. sing. of *hrách*
hrách peas
hráz same as *hráze*
hráze embankment, dam, barrier
hrdlo throat
hrom thunder
hřada plot (in a garden)
hřbet back, spine
hřibě foal, colt
hřích sin
hříchu gen. sing. of *hřích*
hříších loc. plural of *hřích*
hříšník sinner
hřměti to thunder
huba mouth
hůrka hill (dim.)
hvězda star
hýbání movement, motion

chlad cold
chlapec boy, lad
chléb bread
chleba gen. sing. of *chléb*
chlév sty
chlum hill, mound
chodite 2nd pers. plural of *choditi*
choditi to walk, move on foot (habitually)
chomout colar (harness)
chůze gait
chvála praise, glory
chválím 1st pers. sing. of *chváliti*
chváliti to praise, glorify

jablek gen. plural of *jablko*
jablko apple
jazyk tongue, language
jdu 1st pers. sing. of *jíti*
jehla needle
jehně lamb
jeho gen. sing. of *on*
jemu dat. sing. of *on*
jeknouti roar
jezero lake
jezinka forest spirit; shrew
ježdění riding
jho yoke
jih south
jich their, them
jiný other, different (nom. sing. masc.)
jistina capital (money)
jizba room
jizva scar
jícha sauce, gravy (arch.)
jíl silt
jíti to go
jíva willow
jízva older for *jizva*
jméno name
junák young man, youth

kamének or *kamínek* pebble
káti se to repent, show remorse

kláda log, block
klátiti to roll (log); shake down fruit from a tree
klíč key, clue
klobása sausage
kněz priest
koláč cake, ceremonial bread
koleno knee
koňe gen. sing. and nom. plural of *kůň*
kost bone
kostí instr. sing. and gen. plural of *kost*
koukol tumbleweed
koupě buy, purchase
kout corner
kraj edge, end
krav gen. plural of *kráva*
král king
krásný beautiful, pretty
kráva cow
krev blood
krmiti to feed, nourish
krov framework of roof
krt mole
krve gen. sing. of *krev*
kryj 2nd pers. sing. imperative of *kryti*
kryti to cover
křest baptism
kuřata nom. plural of *kuře*
kuře chicken
kuřete gen. sing. of *kuře*
kůl post, pole
kůň horse
kůže skin, hide
květ blossom

lákati to allure, attract
láti to curse, abuse verbally
len flax
let gen. plural of *léto*
lékař doctor
léto summer, year
líbiti se to appeal to, be pleasing, be satisfying
líce cheek
lípa linden, lime tree
líti to pour
lod' boat, small craft
loket elbow
lopata shovel, spade
lov hunting
luštiti to shell, husk, solve
lůj tallow

malina raspberry
maso meat
mateře gen. sing. of *máti*
mák poppy, poppy seed
mám 1st pers. sing. of *míti*
mařiti to ruin, annihilate
máti mother
mech moss
meze limit, boundary
měd' copper
mědi gen. sing. of *měd'*
měr gen. plural of *míra*
měsíc month
město town, city
míchati to mix, stir
mícháš 2nd pers. sing. of *míchati*
míra measure, portion
místo place
míti to have
míza sap
mlat threshing floor
mlčeti to be silent
mléko milk
mlíti to grind, thresh, beat
mluva speech, language
mlýn mill
moci to be able
modliti se to pray
mohu 1st pers. sing. of *moci*
mokrý wet (nom. sing. masc.)
moře sea
moudrý wise (nom. sing. masc.)
moucha fly
mouše loc. sing. of *moucha*
mozek brain
mozk oblique case form for *mozek*
mračiti to frown
mrazu gen. sing. of *mráz*
mráz frost
mše Mass
může 3rd pers. sing. of *moci*
můžeš 2nd pers. sing. of *moci*
mytí active washing
mýdlo soap

najdu 1st pers. sing. of *najíti*
najíti to find
náš our, ours
nejhorší worst (nom. sing. masc.)
nejlepší best (nom. sing. masc.)
nejsladší sweetest (nom. sing. masc.)
nelze it is impossible
nesa while carrying (adv. participle from *nésti* — masc. sing. form)

neseš 2nd pers. sing. of *nésti*
nésti to carry, bear
něho same as *jeho* after preposition
nitka thread
nízko lowly
nízký low (adj.)
noc night
noha leg, foot
nositi to carry, bear (habitually)
nosíš 2nd pers. sing. of *nositi*
noze loc. sing. of *noha*
nožík pen-knife
nůše basket carried on one's back
nůž knife

obrance defender
oheň fire
oko eye
on he
osika type of poplar
ostrý sharp
ovca sheep (sing.)

pás belt, girdle
pátek Friday
pec oven
pecka pit (in fruit)
pečínka roast (of meat)
peku 1st pers. sing. of *péci*
peníz coin
peň trunk, stump
péci to bake
pérko or *pírko* feather (dim.)
pěkný pretty (nom. sing. masc.)
pěna foam
pět five
piješ 2nd pers. sing. of *píti*
piji 1st pers. sing. of *píti*
pil 3rd pers. sing. masc. past of *píti*
piroh dumpling
pivo beer
písek sand
píseň song
písmo writing, script
píšeš 2nd pers. sing. of *psati*
píší 3rd pers. plural of *psati*
píti to drink
plašiti to frighten, scare
plášť coat
plátno cloth
plet' complexion
pleteš 2nd pers. sing. of *plésti*
pleti gen. sing. of *plet'*
pleva chaff
plésti to braid, entwine
plíti to spit; to weed
plný full (nom. sing. masc.)
pluk regiment
pokoj room
pomoci to help
pomohu 1st pers. sing. of *pomoci*
pomoz 2nd pers. sing. imperative of *pomoci*
potoce loc. sing. of *potok*
potok stream
pout pilgrimage, journey
pouto fetters, chains
prosíš 2nd pers. sing of *prositi*
prositi to ask
předivo yarn
předni adj.: front, foremost
přilnouti to adhere to
příčiti to be crosswise, oppose
přísaha oath
přísežný one under oath, sworn (nom. sing. masc.)
příze yarn
psati to write
pustiti to release, let go
puštěný past participle passive of *pustiti*
půst fast, Lent

rádlo primitive (wooden) plough
rámě shoulder (arch. for *rameno)*
rána wound
ret lip
roh horn
roj swarm
rokyta variety of willow
rosol jelly, aspic
rov ditch
rovný straight, even
ruce loc. sing. and nom. plural of *ruka*
ruch movement
ruka hand
rukáv sleeve
ryba fish
řad order, raw
řasa eyelash
řeka river
řešeto sieve
řezati cut, butcher
říci to say
řku 1st pers. sing. of *říci*

sedlo saddle
saze soot
sen dream
seno hay
sil gen. plural of *síla*
silný strong (nom. sing. masc.)
silou instr. sing. of *síla*
síla power
síto strainer
skoupý stingy (nom. sing. masc.)
slad malt
sláma straw
slez gen. plural of *slza*
slezina spleen
sloup pole, post
sloužiti to serve
sloužím 1st pers. plural of *sloužiti*
sloužíš 2nd pers. sing. of *sloužiti*
slunce sun
slza tear
smál se sing. masc. past of *smáti se*
smáti se to laugh
směti to dare
smíš 2nd pers. sing. of *směti*
smrt death
sněhu gen. sing. of *sníh*
sníh snow
snop sheaf
sokol falcon
soud court (of law)
souditi to judge
soudíš 2nd pers. sing. of *souditi*
soudruh comrad
soudruzi nom. plural of *soudruh*
soused neighbour
sousedé nom. plural of *soused*
srdce heart
stoh stack (of hay, straw)
stonati to groan, moan
stoupati arise, step up
stoupáš 2nd pers. sing. of *stoupati*
straka magpie
stráž guard, watch
strom tree
středa Wednesday
střední adj.: mid, central
střecha thatch
střeše loc. sing. of *střecha*
stůl table
stůněš 2nd pers. sing. of *stonati*
svíce candle
syn son
synové nom. plural of *syn*
sýr cheese

šerý grey (nom. sing. masc.)
šest six
šiješ 2nd pers. sing. of *šíti*
šídlo awl
šíti to sew

tahati see *táhnouti*
taký such (nom. sing. masc.)
táhnouti to pull, drag, draw
tělo body
tětiva bowstring
těžko heavily, with difficulty, hard
tchoř polecat; coward
ticho silently, quietly
títi to cut
tlouci to pound, grind
topor ax-handle
tráva grass
trh market
trnož under support of a table
trpěti to suffer
třída class, group
tvrdý hard (nom. sing. masc.)
ty you (sing.)

učitelé teachers (nom. plural)
udice fishhook
ucho ear
ulice street

uzda bride, bit
užinati to reap (imperfect)
užíti to reap
úhoř eel
úřad office
útěcha consolation, comfort
útroba intestines, innards

vajec gen. plural of *vejce*
vaš your, yours
vázati to bind, tie
vážeš 2nd pers. sing. of *vázati*
vedl 3rd pers. sing. masc. past of *vésti*
vedla 3rd pers. sing. fem. past of *vésti*
vejce egg
vésti to lead
věc thing, matter
věřiti to believe, trust
větru gen. sing. of *vítr*
vír whirpool
víra faith
vítr wind
vlci nom. plural of *vlk*
vlcích loc. plural of *vlk*
vléci to drag

vlk wolf
volati to call
volám 1st pers. sing. of *volati*
volej 2nd pers. sing. imperative of *volati*
vosk wax
vozík cart, small wagon
vozů gen. plural of *vůz*
vrah killer, murderer
vranami instr. plural of *vrána*
vranou instr. sing. of *vrána*
vrána crow
všechno all (sing. neuter)
vůl ox
vůle will
vůně fragrance
vůz cart, waggon
vyješ 2nd pers. sing. of *výti*
výti to howl

zajíc rabbit
zákon law, regulation
země country, land, earth
zima winter
zlatiti to gild, make golden
zlato gold
znáš 2nd pers. sing. of *znáti*
znáti to know
zub tooth
zvon bell
žal 3rd pers. sing. masc. past of *žíti* ('to reap')

žalud acorn
žatva harvest
žába frog
žár glow, heat
ženich bridegroom
ženiši nom. plural of *ženich*
žerď pole
Žid Jew
žide nom. plural of *Žid*
žito rye
žínka woman (dim.)
žíti to live; to reap
živina nutrient
žlab manger, trough
žlábek groove
žláza gland
žlutý yellow (nom. sing. masc.)
žnec reaper
žnu I reap (1st pers. sing. of *žíti* 'to reap')
žřiedlo (Old Cz) source; spring

SLOVAK

baba old woman, wife, woman
bieda poverty
behať to run
biely white (nom. sing. masc.)
biť to hit, strike, beat
blcha flea
blud error, mistake
blch gen. plural of *blcha*
bobor beaver
Boh God
bor pine; pine forest
boru gen. sing. of *bor*
bôb broad bean
bôbu gen. sing. of *bôb*
bôľ pain, ache
bôr same as *bor*
brada chin, beard
breh bank, shore
breza birch

budú 3rd pers. plural future of *byť*
býk bull, ox

celý all, whole
cudzí adj.: somebody's else; foreign
čas time
černica blackberry
čiara a line
čierny black (nom. sing. masc.)
čistý clean, pure
článok link, joint, article
člen member, part
črpák dipper
črta feature, outline

dar gift, talent
dávam 1st pers. sing. of *dávať*
dávať to give
dážď rain, shower
dažďa gen. sing. of *dážď*

dedina village, settlement
deň day
desat' ten
deväť nine
deviati gen. of *deväť*
diat' sa to happen, take place
diera hole
diet'a child, baby
divák bystander, onlooker
dívat' sa to look
dlaň palm (of the hand)
dláto chisel
dlhý long (nom. sing. masc.)
dlžník debtor
dĺžka length
dobré good (neuter)
dobrého gen. sing. of *dobré*
dobrý good (masc.)
dol pit; depth (older)
dom house
doznanie acknowledgement
drahá costly; dear (fem.)
dráha road
dvor mansion; yard; court
dym smoke, fume

hlava head
hláv gen. plural of *hlava*
hnoj manure
holý bare, naked (nom. sing. masc.)
hora hill, mountain
horách loc. plural of *hora*
hrada plot, garden space
hranica border, boundary
hrat' to play
hrdlo throat
hrdza rust, mildew
hriech sin
hrmiet' to thunder, rumble
hrom thunder
huba mouth
hviezda star
hýbanie motion, act of moving
hýbaní gen. plural of *hýbanie*

chleba gen. sing. of *chlieb*
chlieb bread
chliev sty, barn
chlp hair
chôdza walk, gait
chomút collar (harness)
chválim 1st pers. sing. of *chválit'*
chválit' to praise

ihla needle
ihrisko playground, stadium

jamiek gen. plur. of *jamka*
jamka small hole, pit
jamôk alternative form of *jamiek*
jeden one (nom. sing. masc.)
jelša alder

kajat' sa to repent, show remorse
klbása sausage (dial.)
kl'úč key
kňahyňa princess
kňaz priest, pastor
koňa gen. sing. of *kôň*
koniec end
kost' bone
koža skin, hide
kôň horse
kôpor dill
kôpru gen. sing. of *kôpor*
kôš basket
král' king
krásny beautiful (masc.)
krava cow
kráv gen. plur. of *krava*
krídlo wing
krst baptism
krsta gen. sing. of *krst*
krt mole
krta gen. sing. of *krt*
krv blood
krvi gen. sing. of *krv*
kŕmiť' to feed, nourish
kus piece, morsel
kúkol tumbleweed
kúpa purchase, item bought
kúpený past part. passive of *kúpit'*
kúpit' to buy, purchase
kút corner
kvet flower, blossom

laket' elbow
lakomý stingy, greedy
len W., S. Cent. and E. Slk dial. for *l'an*
les forest
lipa linden
líce cheek
líhat' (si) to lay down (for sleeping)
líška fox
lna older form of *l'ana*
lúka meadow

lýtko calf (of the leg)
l'an flax
l'ana gen. sing. of *l'an*

mach moss
mak poppy, poppy seed
mäso flesh
med' copper
medza boundary, dividing line, marker
mesiac month
mesto town, city
mestá nom. plural of *mesto*
metiel gen. plural of *metla*
metla broom
mcha gen. sing. of *mach* (arch.)
miazga juice, sap
miest gen. plural of *mesto*
miešaš 2nd pers. sing. of *miešat'*
miešat' to mix, stir
mladé young (sing. neuter and nom. plural)
mlieko milk
modlit' sa to pray
moch S. Central Slk dial. for *mach*
mokrý wet (nom. sing. masc.)
more sea
mozg oblique case for *mozog*
mozog brain
môct' to be able
môžem 1st pers. sing. of *môct'*
môžeš 2nd pers. sing. of *môct'*
mrazu gen. sing. of *mráz*
mráz frost
mŕtvy dead (nom. sing. masc.)
múdry wise (nom. sing. masc.)
mydlo soap

nesiem 1st pers. plural of *niest'*
nesieš 2nd pers. sing. of *niest'*
niesol participle of *niest'*
niest' to carry, bear
noc night
nocí gen. plural of *noc*
noha leg, foot
nos nose
nosit' to carry, bear (habitually)
nosíš 2nd pers. sing. of *nosit'*
noša bundle carried on the back
nový new (masc.)
noze loc. sing. of *noha,* arch. and dial., now *nohe*
nože gen. sing. of *nôž*
nôž knife

obranca defender
ocot vinegar SE of Central Slk
okienko window (dim.)
omša Mass
osika type of poplar
ovca sheep (sing.)
ovos oats

pás belt, girdle
päť five
peniaz coin, money
piatok Friday
piaty fifth (nom. sing. masc.)
piect' to bake
piekol participle of *piect'*
piesok sand
pijem 1st pers. plural of *pit'*
piješ 2nd pers. sing. of *pit'*
písat' to write
písmo writing
píšeš 2nd pers. sing. of *písat'*
pit' to drink
plášť coat
plátno cloth
pletieš 2nd pers. sing. of *pliest'*
pliest' to knit, braid
plietla 3rd pers. sing. fem. past of *pliest'*
pl'ut' to spit
pôst fast, Lent
pôstu gen. sing. of *pôst*
pradivo yarn
pravda truth, justice
priadza yarn, spinning material
prísaha oath
prútia gen. sing. of *prútie*
prútie wicker, twigs for weaving baskets
prútiu dat. sing. of *prútie*
prýšť pimple
puto fetter, chain
púť pilgrimage, journey
pýtaš 2nd pers. sing. of *pýtat'*
pýtat' to ask, question

rad row
rakyta type of willow
rameno shoulder, upper arm
rana wound
rázga twig; rod
raž rye
rezat' to cut, butcher
riect' to speak, say

rieka river
roh horn; corner
rozum reason, brain
ruka hand
rukáv sleeve
ruku acc. sing. of *ruka*
rúčka little hand, handle
rýdzi pure, genuine

sen dream
seno hay
sestier gen. plural of *sestra*
sestra sister
siat' to sow
sila force, strength
skúpy stingy, miserly
slad malt
slama straw
slúžim 1st pers. plural of *slúžit'*
slza tear, teardrop
slúžiš 2nd pers. sing. of *slúžit'*
slúžit' to serve, do one's duty
sĺz gen. plural of *slza*
smieš 2nd pers. sing. of *smiet'*
smiet' to dare, take liberties
smrt' death
snop sheaf
sol' salt
sova owl
spievam 1st pers. sing. of *spievat'*
spievat' to sing
stena wall
stĺp pillar, post
stola gen. sing. of *stôl*
stôl table
stráž guard
strmeň stirrup
stúpaš 2nd pers. sing. of *stúpat'*
stúpat' to pace, step
súd court (of law)
súdruh comrad
súdruhovia nom. plural of *súdruh*
svetielko light (dim.)
svieca candle
svoj one's own
syn son
synov gen. plural of *syn*

šerý grey, dusky
šest' six
šidlo awl
šit' to sew, stitch
štedrý liberal, generous

tebou instr. sing. of *ty*
tetiva bowstring
tchor polecat
tiahnut' sa to stretch, to extend
tráva grass
tretí third (nom. sing. masc.)
triasla 3rd pers. fem. sing. past of *triast'*
triast' to shake
trúba trumpet, horn
tvoj your, yours
ty you (sing.)
t'ažko with difficulty, hard (adv.)

učenica disciple (fem.)
ulica street
ulíc gen. plural of *ulica*
útecha consolation, solace
útroba gut, intestine, now used almost exclusively in the plural

vajce egg
veniec wreath, garland
vera now only in expression "Honest to God"
vetra gen. sing. of *vietor*
viazat' to bind, tie
viažeš 2nd pers. sing. of *viazat'*
viedla 3rd pers. sing. fem. past of *viest'*
viedol participle of *viest'*
viera faith
viest' to lead
vietor wind
vinen guilty (nom. sing. masc. — short form)
vojaci nom. plural of *vojak*
vojak soldier
volám 1st pers. sing. of *volat'*
volat' to call
vol'a see *vôľa*
vošš louse
voz cart, waggon
voza gen. sing. of *voz*
vôl ox
vôl'a will, desire
vôňa smell, aroma
vrana crow
vranou instr. sing. of *vrana*
vrán gen. plural of *vrana*
vŕba willow
vše all (as bound morpheme) in such forms as *všetko, všemocný, vševed,* etc.

všetko all
vyješ 2nd pers. sing. of *vyt'*
vyt' to howl

zajac hare
zákon law
zelený green (nom. sing. masc.)
zem earth (coll. *zema)*
zima winter
zívat' to yawn
znak sign, symbol, mark
znat' to know
znáš 2nd pers. sing. of *znat'*
zvon bell

žarnov millstone
žena wife, woman
ženích fiance
ženísi nom. plural of *ženích*
ženou instr. sing. of *žena*
žial' sorrow, regret
žien gen. plural of *žena*
žit' to live, to be alive
žitie living
žľab manger; trough; crib
žľaza gland
žrd' pole
žut' to chew

POLISH

bać się to fear, to be afraid
bał się 3rd pers. sing. masc. past of *bać się*
bardzo very
będzie 3rd pers. sing. future of *być*
biały white (adj.)
bić to beat
bielić to whiten
bij 2nd pers. sing. imperative of *bić*
bijesz 2nd pers. sing. of *bić*
biodra nom. plural of *biodro*
biodro hip
bory nom. plural of *bór*
bób broad bean
bóbr beaver
bór primeval forest
Bóg God
brew eyebrow
broda beard
brodę acc. sing. of *broda*
brzeg bank, riverside
brzoza birch
być to be

cały all, the whole
cedzić to strain
cedzidło strainer
cep flail
cewa spool
chełm hill (arch.)
chleb bread

chlew sty, barn
chodza walk, gait (arch.)
cena price
chłopiec boy, lad
chłód cold
chodzę 1st pers. sing. of *chodzić*
chodzić to go (habitually)
chomąto horse-collar; stirrup
ciało body
ciąć to cut
ciądzać Old P: to seize, confiscate for nonpayment of debts
ciągać to drag
cieląt gen. plural of *cielęta*
cielęta calves (nom. plural)
ciemny dark, dim
ciepły warm
ciężko heavily
czarny black (nom. sing. masc.; adj.)
czele loc. sing. of *czoło*; now only in expressions: ,,na czele pochodu''; ,,stać na czele organizacji'', itp.
czernica blackberry; blueberry
czerw grub, maggot
człon element, member, link
członek member
czoła nom., acc. plural of *czoło*
czołgać to crawl
czoło forehead

czop peg, plug, bung
czółno small boat, dug-out
czrześnia Old P for *trześnia*
czyj whose (nom. sing. masc.)
czysto clean (adv.)
ćma moth

daleki far, distant (nom. sing. masc.)
dar gift, talent
dąb oak
dębów gen. plural of *dąb*
dęby nom., acc. of *dąb*
długi long (nom. sing. masc.; adj.)
dobry good (nom. sing. masc.; adj.)
domek maisonette, cottage
droga road, way; dear, costly (fem.)
drudzy nom. plural of *drugi* (masc.)
drugi second, other (nom. sing. masc.)
drugie second, other (nom. sing. neuter)
drżeć to tremble, shiver
działo cannon
dzieci children
dzień day
dziesiąty tenth (masc.)
dziesięć ten
dziewiąty ninth (nom. sing. masc.)
dziewięciu gen.-dat.-loc. of *dziewięć*
dziewięć nine
dźwigać to lift (with difficulty), to heave

gaj grove (that is, rich in growth)
gałąź branch
gardło neck
gęś goose
giąć to bend
ginąć to die, to perish
głodny hungry
głodu gen. sing of *głód*
głód hunger
głuchy deaf (adj.)
głusi nom. plural of *głuchy*
głuszy gen. sing. of *głusza*
gorzki bitter (nom. sing. masc.)
gra play, game
grać to play
godzina hour
gołąb pigeon
gołębiem instr. sing. of *gołąb*
grobia older form of *grobla*
grobla dam, dike
groch peas
grodza enclosure
gród historic settlement
grzbiet back; spine
grzech sin
grzęda plot, garden space
grzmieć to thunder
gwiazda star

hełm helmet

igiełka dim. of *igła*
igła needle
igrać to dally; to sport
ikra fish eggs
ił loam
inny other, different (nom. sing. masc.)
izba room; apartment

jabłko apple
jadą 3rd pers. plural of *jechać*
jagnię lamb
jajko egg
jasła manger
jechać to drive; to ride
jem 1st pers. sing. of *jeść*
jesiotr sturgeon
jeść to eat
jezioro lake
jeździć to ride, travel (habitually)
jeżdżenie active driving, riding
jeżdżę 1st pers. sing. of *jeździć*
jędza shrew; witch
jęknąć to moan, groan
język tongue, language
jucha gore, blood (of animals)
junak young man, youth

kajać się to repent, show remorse
karczma tavern
kąkol tumbleweed
kąt corner
kęs bite, small bit, morsel
kiedy when
kiełbasa sausage
kiepski poor; second rate
kląć to swear, curse
klękać to kneel
klikać to call (arch.)
klnie 3rd pers. sing. of *kląć*
klucz key

kłócisz 2nd pers. sing. of *kłócić*
kłócić to argue
koń horse
koński adj. of *koń*
kościele loc. sing. of *kościół*
kościół church
kość bone
kot cat
kółko circle; ring
kóń Old P, now *koń*
kózka goat (dim.)
kra floating ice
krew blood
kręto spirally, tortuously
kropla drop (of liquid)
król king
krwi gen. sing. of *krew*
krzywy crooked, crippled
ksiądz priest
kupić to buy
kupiec businessman; merchant
kupiony past participle passive of *kupić*
kwiat flower

laska cane
len flax
lice face; cheek (literary)
lipa linden
lód ice

łaknąć feel hunger
łaska favour, good will, grace
łokieć elbow
łowiec hunter
łza tear

macocha stepmother
macosze dat. sing. of *macocha*
mak poppy flower, poppy seed
martwy dead
mączka flour (dim.)
mądry wise (nom. sing. masc.)
mianowicie namely
mąka flour
mąż husband
miasto city, town
miazga pulp
miażdżyć to crush, reduce to pulp
miedza boundary strip
miedź copper
miesiąc month; moon (dial.)
mieście loc. sing. of *miasto*
mięso meat, flesh
milczeć to be silent
miodu gen. sing. of *miód*
miotła broom
miód honey
mleć to grind
mleko milk
młot hammer
młócić to thrash
młócisz 2nd pers. sing. of *młócić*
mnich monk
mnisi nom. plural of *mnich*
mniszy adj. referring to *mnich*
modlić się to pray
mołwa arch. for *mowa*
morze sea
mosiądz brass
mowa speech
móc to be able
mrozu gen. sing. of *mróz*
mróz frost
msza Mass
mycie process, act of washing
mydło soap

nalegać to insist, to press
nędza poverty, misery
niesie 3rd pers. sing. of *nieść*
niesiecie 2nd pers. plural of *nieść*
nieść to carry, bear
nieśli 3rd pers. masc. plural past of *nieść*
niosą 3rd pers. plural of *nieść*
niosę 1st pers. sing. of *nieść*
niosła 3rd pers. sing. fem. past of *nieść*
noc night
nodze loc. sing. of *noga*
noga leg, foot
nogi gen. sing. and nom., acc. plural of *noga*
nos nose
nosze stretcher
nożny adj. pertaining to *noga*
nóg gen. plural of *noga*
nóż knife

obrońca defender
ocet vinegar
ogień fire
ojciec father
oko eye
orzeł eagle
osika type of poplar

ostry sharp, biting (nom. sing. masc.)
owca sheep (sing.)
owies oats
ósmy eighth (nom. sing. masc.)

pas belt, girdle
pasterz shepherd
pchła flea
pełny full
pęto fetter, chain
piąty, -a, -e fifth
pić to drink
piec to bake
piekł 3rd pers. sing. masc. past of *piec*
pień stump
pierwszy first (nom. sing. masc.)
pies dog
Pietrze voc. sing. of *Piotr*
pięć five
pięta heel
pij 2nd pers. sing. imperative of *pić*
pijesz 2nd pers. sing. present of *pić*
piję 1st pers. sing. present of *pić*
Piotr Peter
pisać to write
piszę 1st pers. sing. present of *pisać*
plece shoulder (arch.), now used only in plural *(plecy)*
pleść to knit, braid
plewa chaff
plon crop, yield
plótł 3rd pers. sing. masc. past of *pleść*
pluć to spit
płacony paid
płci gen. sing. of *płeć*
płeć sex
płótno cloth
Polsce loc. sing. of *Polska*
Polska Poland
poziom level
pożoga conflagration
prośba plea, request
przerębla hole chopped in ice
przędza yarn, material for spinning
przylgnąć to adhere, stick to, cling
puszczony past participle passive of *puścić*
puścić to release, to let go

radło primitive plow (of wood)
rąbać to chop
rączka dim. of *ręka*
rąk gen. plural of *ręka*
ręce loc. sing. of *ręka*
ręka hand
rękaw sleeve
ręki gen. sing. of *ręka*
robótka work (dim.)
rolnicy nom. plural of *rolnik*
rolnik farmer
rosnąć to grow
róść Old P, now *rosnąć*
rózga switch, twig
różdżka dim. of *rózga*
rydz reddish mushroom
rząd raw
rzeka river
rznąć to cut, butcher

sąd court (of law)
sądu gen. sing. of *sąd*
sądy nom., acc. plural of *sąd*
sen sleep
ser cheese
sierota orphan
sierp sickle
siostra sister
siódmy seventh (nom. sing. masc.)
sióstr gen. plural of *siostra*
skąpy stingy, miserly (nom. sing. masc.)
słoma straw
słońce sun
słup pole
snop sheaf
socha primitive plough
sowa owl
sów gen. plural of *sowa*
stać to stand
stał 3rd pers. sing. past of *stać*
starzec old man
stąpać to step, pace
stąpasz 2nd pers. sing. of *stąpać*
stoły nom., acc. plural of *stół*
stopa foot
stół table
stóp gen. plural of *stopa*
stróża guard, watch
strzecha thatch
strzemię stirrup
strzesze loc. sing. of *strzecha*
szary grey, ashen (nom. sing. masc.)
szczerzyć to grin
szłom helmet (arch.)
szósty sixth (masc.)
szpiedzy nom. plural of *szpieg*

szyć to sew
szyj 2nd pers. sing. imperative of *szyć*
szyja neck

ścdza arch. for *ścieżka*
ścieżka path
śledziona spleen
śmieć to dare
śmierć death
śmiesz 2nd pers. sing. of *śmieć*
środa Wednesday
śrzoda Old P for *środa*
świat world
świeca candle
świecie loc. sing. of *świat*

taczać to roll
takie this kind, such (nom. sing. neuter)
targ market
tłuc to pound, grind
tłumacz translator, interpreter
tniesz 2nd pers. sing. of *ciąć*
trąba horn, trumpet
trzeci third
trześnia cherry (arch.)
twardy hard
twierdzić to claim

ubić to pound, beat (perfective)
ucho ear
ulga relief
ulica street
uzda bridle

watra campfire
wątroba liver
wbić to pound in
wełna wool
weselić to gladden; to rejoice
wesoły joyful, merry
wesz louse
wędka fishhook
węgorz eel
wiara faith, belief
węże serpents, snakes
wiązać to tie, bind
wiążesz 2nd pers. sing. of *wiązać*
wielcy nom. plural of *wielki*
wielki big, large
wierzba willow
wierzch top
wierzyć to believe
wieś village
wieść to lead
wilk wolf
wiodła 3rd pers. sing. fem. past of *wieść*
wiosna spring
wiódł 3rd pers. sing. masc. past of *wieść*
woda water
wola will
wozy nom., acc. plural of *wóz*
woń aroma
wóz cart, waggon
wrócić to return
wrócisz 2nd pers. sing. of *wrócić*
wstążka ribbon
wstęga band, ribbon
wszystko all (nom. sing. neuter)
wziąć to take

zagnieździć się to nestle, build a nest
zagnieżdżony past participle passive of *zagnieździć*
zając rabbit
ząb tooth
zestrzelić to shoot
zestrzygać to clip off
zęba gen. sing. of *ząb*
zęby nom., acc. plural of *ząb*
ziemia soil, earth
złoto gold
znać to know, be acquainted
znak sign, mark
znanie knowledge, knowing (arch.)
znasz 2nd pers. sing. of *znać*
źródło spring, source

żar embers
żąć to reap
żądza desire, lust
żął 3rd pers. sing. masc. past of *żąć*
żenić się to marry, to take a wife
żłób manger
żłódź glazed frost (arch.)
żona wife
żonie dat. sing. of *żona*
żółć bile; bad temper
żółty yellow
żółw turtle
żyto rye

UPPER LUSATIAN

bjerjo while taking (adv. participle of *brać*)
bjeru 1st pers. sing. of *brać*
błóto mud
bluwać to throw up
bob broad bean
Boha gen. sing of *Bóh*
bok side
bosy barefooted
boza gen. sing. of *bóz*
boži God's (adj.)
Bóh God
bóle more
bóz lilac
bratr brother
bratřa nom. plural of *bratr*
brać to take
břěmjo burden, weight
břěza gen. sing. of *brjóh*
brjóh bank, shore
brjoze loc. sing. of *brjóh*
brjuch belly
brjuše loc. sing. of *brjuch*
broda beard
bróniš 2nd pers. sing. of *brónić*
brónić to arm
brózda furrow

cuzy strange, foreign
cyły whole, all
cyrkej church
čerw worm
česać to comb
čisto clean (adv.)
čisćić to clean
čisću 1st pers. sing. of *žisćić*
čitaš 2nd pers. sing. present of *čitać*
čitać to read
človiek person
člónk member
čołm boat, small craft
čoło forehead
čornuch Negro
čornuši nom. plural of *čornuch*
čorny black
črjóda crowd
črjósło ploughshare, cutting edge

daloki far, distant
dejić to milk
deska board
dešć rain
dešćojty rainy
dłónje gen. sing of *dłóń*
dłóń palm of the hand
dobraj good (nom. dual masc.)
dobry good
dohrać to play to the end
dołh debt
dołhi long
dołho long (adv.)
domk small house, cottage
dosć enough
dójić to milk
drjewo tree, wood, forest
droha road, street
drohi dear; expensive
drozy nom. plural of *drohi*
droždźe yeast
dróha road
dróže dearer (adv.)
dub oak
dubje loc. sing. of *dub*
duša soul, spirit
dušemi instr. plural of *duša*
dwór yard
dym smoke
dźeń day
dźeński daily
dźeržeć to hold
dźesać ten
dźewjaty ninth
dźewjeć nine
dźěd grandfather
dźěłaće workers
dźiw wonder, miracle
dźiwno strangely

hałoza branch (of tree)
hałuza wariant of *hałoza*
hałza variant of *hałoza*
hałzaty with many branches, rich in branches
hałzojty same as *hałzaty*
hałžka small branch (of a tree)
hańbić to defile, disgrace
hasnyć to go out (of fire, light), be extinguished
hibać to move
hinak otherwise
hinaki different
hiny other, different (arch.)

hłosa gen. sing. of *hłós*
hłowa head
hłós voice
hluchi deaf
hluši nom. plural of *hluchi*
hnězdźić to nest
hnězdźu 1st pers. sing. of *hnězdźić*
hołb dove
hołk noise
hoły bare, naked
hordło throat
hordy proud
hórje worse
hósć guest, visitor
hozdźa gen. sing. of *hózdź*
hózdź nail
hra game
hranica border, boundary
hrać to play
hrimać to thunder, rumble
hrimot sound of thunder
hrjada garden plot
hroda gen. sing. of *hród*
hroch peas
hród castle, fortress
hubić to destroy, ruin
hubju 1st pers. sing. of *hubić*
hwězda star

chemija chemistry
chilić so to bow
chłopc boy, lad
chlěb bread
chodźić to go, walk (habitually)
chodźo while walking (adv. participle of *chodźić*)
chodźu 1st pers. sing. of *chodźić*
chribjet spine
chróst brushwood
chrósta gen. sing. of *chróst*
chwalić to praise
chwalo while praising (adv. participle of *chwalić*)

jabłuko apple
jatřob hawk
jazyk tongue
jehła needle
jehnjo lamb
jědł masc. sing. perfect participle of *jěsć*
jěsć to eat
jězdźić to travel, ride (habitually)
jězdźu 1st pers. sing. of *jězdźić*
jězor lake
jěž hedgehog
jěža gen. sing. of *jěž*
jił clay, silt
jiny other, different (arch.)
jucha manure

kać so to repent, show remorse
kěrluš chorale
kidać to pour; to sprinkle
kjawkać to whimper; to chirp
kiwać to nod, beckon
kłóda log, block, fetters
kłóć to stab, jab
kłóćić to shake loose
kłóćiš 2nd pers. sing. of *kłóćić*
klacać to limp
klakać to kneel
klon maple
knjeni lady
knjez lord, mister
knot mole
kołbasa sausage
koleno knee
konjej nom. dual of *kóń*
konop hemp
konopje gen. sing. of *konop*
korčma tavern
kormić to feed, fatten
korto trough
koryto variant of *korto*
kosćemi instr. plural of *kósć*
košla shirt
košula variant of *košla*
kotoł large kettle, cauldron
kozoł goat (male)
koža skin
kóń horse
kóstka bone (dim.)
kósć bone
kózła gen. sing. of *kozoł*
krawny bloody
krej blood
krjepić to sprinkle
krojić to dress, decorate
kruwa cow
krwawny variant of *krawny*
křesać to strike a spark
křidło wing
křćić to baptize
kupić to buy
kupjeny past participle passive of *kupić*
kwět flower

łakomc one fond of delicacies
łochć elbow
łojić to catch
łós elk
łóžko bed (dim.)

lahnu 1st pers. sing. of *lahnyć*
lahnyć to breed, hatch
ledźba loin, tenderloin
lemić to break, crush
len flax
lěk medicine
lěka gen. sing. of *lěk*
lěkar doctor
lěkarja gen. sing. of *lěkar*
lěpšej nom. dual of *lěpši*
lěpši better
lěto year
lico face, cheek
lipa linden tree
lodźe loc. sing. of *lód*
lochki light, easy
lód ice
lódny icy
lud people

měč older for *mječ*
měd honey
mědny honey (adj.)
mědź copper
měra measure
měrjacy measuring
měsac moon; month
město place
měšćan town dweller
měć to have
měza juice
mjaso meat
mjasć to press, squeeze, crush
mjatu 1st pers. sing. of *mjasć*
mje me (gen., acc. of *ja)*
mječ sword
mjedu gen. sing. of *měd*
mjedźe loc. sing. of *měd*
mjelčeć to be silent
mjeno name
mjerwa matted straw, bedding for cattle
mjećeš 2nd pers. sing. present of *mjasć*
mjeza border, boundary
mjezha old for *měza*
młót maul, hammer
młóta gen. sing. of *młót*
mlěć to grind, mill
mloko milk
mlóce loc. sing. of *mloko*
modlić so to pray, flatter
moch moss
morjo sea
mortwy dead
mosaz brass
mozhy brain; marrow (arch., now *mozy*)
móc to be able
móch older for *moch*
módry blue
mókry wet (dial. with *ó*<*ō*)
móžeš 2nd pers. sing. of *móc*
mróčić darken, make gloomy
mróz frost
mróza gen. sing. of *mróz*
mucha fly
muše loc. sing. of *mucha*
mydło soap
myj 2nd pers. sing. imperative of *myć*
myć to wash
myće washing

nachilny inclined
nan father
němy dumb
niski low
nić thread
njedźela Sunday
ŋjese 3rd pers. sing. of *njesć*
ŋjeseće 2nd pers. plural of *njesć*
ŋjeseću dial. for *ŋjeseće*
niesł 3rd pers. sing. past of *njesć*
ŋjeso while carrying (adv. participle of *njesć*)
ŋjesć to carry
ŋjesu 1st pers. sing. of *njesć*
noha leg, foot
nohi nom. plural of *noha*
nochć nail (on finger or toe)
nosa gen. sing. of *nós*
nosyć to carry
nošach 1st pers. sing. imperfect of *nosyć*
nošeše he was/you (sing.) were carrying (imperfect tense)
noze loc. sing of *noha*
nóc night
nós nose
nóž knife
nuza poverty, need, necessity

palić to burn
palu 1st pers. sing. of *palić*
pas belt
pěc stove, oven
pěskojty sandy
pcha flea
pij 2nd pers. sing. imperative of *pić*
pinca cellar
pić to drink
piwnica dial. for *pinca*
pjaty fifth
pjec to bake
pjecy gen. sing. of *pěc*
pječeće 2nd pers. plural of *pjec*
pječo while baking (adv. participle of *pjec*)
pjelcha diaper
pjelnić to fill
pjelucha variant of *pjelcha*
pjenjezy money
pjeńk stump
pjero feather, pen
pjerchać to flee, scamper off
pjeć five
płaćić to pay
płóšić to frighten
płótno cloth
płaću 1st pers. sing. of *płaćić*
pleco haunch, thigh, leg of meat
plesć to knit, braid
pletł 3rd pers. masc. sing. past of *plesć*
pluwać to spit
połny full
polca shelf
polica variant of *polca*
polo field
pomahać variant of *pomhać*
pomhać to help
popjeł ash
popjer pepper
porst finger
pos dog
pośić so to sweat
prěčiš 2nd pers. sing. of *prěčić*
prěčić to go crosswise
prěčny lying, running across or crosswise
prědk front
prědni front, first, original
prěć to deny, contradict
prjedy previously
prjódce in front, up front (adv.)
prosyć to ask
prošenje asking, begging
próca work, effort
próskaš 2nd pers. sing. of *próskać*
próskać to rattle, rustle, break with a snap
přasć to spin
přaza spinning, yarn
přeco always
před before, in front of
přechwalić to praise greatly
přestrěć to stretch out
přeć to wish well, be of good will
přećel friend
přećelemi instr. plural of *přećel*
při by, near
pšenica wheat
pšeńca variant of *pšenica*
pušćeć to let go
pyr wheat-grass
pytanje search, quest

radło plough
ramjo arm
rěka river, stream
rěznicy nom. plural of *rěznik*
rěznik butcher
rěznikami instr. plural of *rěznik*
rjad row
rjebło rib
rojić so to swarm
rosć to grow
rot mouth
rota gen. sing. of *rot*
rož rye
rót mouth
ruce loc. sing. of *ruka*
ruka hand
rukajca glove
rukami instr. plural of *ruka*
ruki nom. plural of *ruka*
ržeć to tremble
ržě gen. sing. of *rož*

sad fruit (coll.)
sadźe loc. sing. of *sad*
sazy soot (plural)
selić to salt
serp sickle
słabojty sickly
słoma straw
słowo word

słódkojty somewhat sweet
słĕbro silver
sliza dial. for *sylza*
směš 2nd pers. sing. of *směć*
směć to dare, be permitted
smjerć death
sna older for *sona*
sona gen. sing. of *són*
sotra sister
són sleep, dream
spožčić to reward; lend
sroka magpie
stajić to place, build
stać to stand, stand for
stejeć variant of *stać*
stejo while standing (adv. participle of *stać*)
stojeć variant of *stać*
stoléćo century
strach terror, fear
strachliwy cowardly, fearful
strašidło bogeyman
strašić perfective of *trašić*
strašnik monster, demon
strašny dangerous, threatening
straž guard
strona side, direction
stróža guard
střělić to shoot to bits (perfective)
střihać to clip off, shear (perfective of *třihać*)
sćina reed, rushes
suchi dry (masc.), skinny
swěca candle, lamp
swjerbjeć to itch
syła power, strength
sylza tear
syn son
syno hay
synojo nom. plural of *syn*
šesty sixth
šěry gray
šmrěk spruce
šmrěka gen. sing. of *šmrěk*
šmrjók variant of *šmrěk*
šow seam
šćěrić to show one's teeth, grin

tebje gen., acc. sing. of *ty*
tepić to light a fire, heat
teptać to trample
tchór polecat, coward
tchórja gen. sing. of *tchór*
tnješ 2nd pers. sing. of *ćeć*
tołc to pound
torhać to tear, rip, demolish
torhnyć perfective of *torhać*
tón this (masc.)
tradać to need, suffer, want
trašidło same as *strašidło*
trašić to frighten, terrify
trašliwy same as *strachliwy*
trašnik same as *strašnik*
trašny same as *strašny*
trěć to rub
trjebić to clean (for eating), thin out
trješ 2nd pers. sing. of *trěć*
třasć to shake, tremble
třeći third
třěcha roof
třělam 1st pers. sing. of *třěleć*
třěleš 2nd pers. sing. present of *třěleć*
třěleć to shoot (imperfective)
třělić to shoot (perfective)
třěska splinter
tři three
třihać to shear
třmjeń stirrup
třo three (masc. personal)
twar honeycomb
twarje gen. sing. of *twar*
ty you (sing.)

ćahać to drag, pull
ćahnu 1st pers. sing. of *ćahnyć*
ćahnył masc. sing. perfect participle of *ćahnyć*
ćahnyć to pull
ćazać to confiscate; to take over
će acc. sing. (short form) of *ty*
ćelata nom. plural of *ćelo*
ćeleća gen. sing. of *ćelo*
ćelo calf
ćesać to hew
ćeć to cut
ćežko heavy (adv.)
ćěło body
ćěmno dark (adv.)
ćěmny dark
ćicho quietly
ćma darkness
ćopło warm (adv.)
ćopły warm

wěra faith
widźo while seeing (adv. participle of *widźeć*)
wjedła fem. sing. perfect participle of *wjesć*
wjedźeš 2nd pers. sing. of *wjesć*
wjedźo while leading (adv. participle of *wjesć*)
wjelk wolf
wjerba willow
wjerch top, summit, peak
wjes village
wjeselić to make glad
wjeselo gladness, joy
wjesło oar, scull, paddle
wjesoły happy, glad
wjesć to lead
wlec to drag
wnučk grandson
woheń fire
wohnišćo campfire
woko eye
woł bull
wołaj nom. dual of *woł*
wołam 1st pers. sing. of *wołać*
wołaš 2nd pers. sing. of *wołać*
wołać to call
wola freedom, will
worjoł eagle
wosm eight
wosmi gen. sing. of *wosm*
wosoł donkey
wosyca variety of poplar
woš louse
wowca sheep (sing.)
wowcami instr. plural of *wowca*
wows oats
woza gen. sing. of *wóz*
wozmu 1st pers. sing. of *wzać*
wozyć to convey, haul
wósk wax
wóska gen. sing. of *wósk*
wósła gen. sing. of *wosoł*
wóst thistle
wótc ancestor, father
wótry sharp
wótřić to sharpen
wóz waggon
wřeskaš 2nd pers. sing. of *wřeskać*
wřeskać to scold, yell
wroha gen. sing. of *wróh*
wrohojo nom. plural of *wróh*
wróh murderer, killer
wróna crow
wrónami instr. plural of *wróna*
wrónu acc.-instr. sing. of *wróna*
wšo same as *wšón*
wšón all, whole (masc.)
wuda hook and line for fishing
wuhor eel
wuhrać to win
wucho ear
wuchodźić to go out, leave
wulcy nom. plural of *wulki*
wulica street
wulki big, large (masc.)
wumazać wipe off
wuměrić to measure out
wusoki high (coll.)
wutroba heart, courage
wuzda bridle
wysoki high (literary)
wzać to take

zahubić to ruin, destroy
zajac rabbit
zarjad administrative bureau
zarjedźe loc. sing. of *zarjad*
zaso again
zbože happiness, health
zbožo variant of *zbože*
zeleny green (masc.)
zelo herbs (medicinal)
zemja earth, land
zhubić perfective of *hubić*
złoto gold
złoćiš 2nd pers. sing. present of *złoćić*
złoćić to gild, make golden
změnić to change
znaješ 2nd pers. sing. of *znać*
znajo while knowing (adv. participle of *znać*)
znamjenja gen. sing. of *znamjo*
znamjo mark, sign, symbol
znać to know
zorno grain
zwěrjo animal
zyma cold (noun and adv.), winter
zywać to yawn
želwja turtle
žiwjenje life
žłob manger, trough, gutter
žołč bile, gall
žołty yellow
žona woman

žórło source, spring
žrěbjo foal, colt
žrědło dial. for *žórło*
žrjeć dial. variant of *ržeć*
žrjódło dial. for *žórło*

LOWER LUSATIAN

bjerjośo 2nd pers. plural of *braś*
bjeŕ 2nd pers. sing. imperative of *braś*
bjeŕšo 2nd pers. plural imperative of *braś*
bluwaś to vomit
boce loc. sing. of *bok*
Bog God
bok side
bosučki dim. form of *bosy*
bosy barefooted
božy divine, godly
brjaza birch
brjaze loc. sing. of *brjaza*
braś to take
brjeza older form for *brjaza*
brjog bank, shore
brjoze loc. sing. of *brjog*
broda beard, chin

carny black
cas time
cały entire, all
cerw worm, maggot
cesaś to comb, brush
cesto often, frequently
cesć honour, decency
cłowjek man, husband
cołn boat, small craft
coło forehead
cora yesterday
crjowo gut, intestine
cuś feel, perceive
cuzy foreign, strange
cysty clean
čaj tea
českí Czech (adj.)

daloki far, distant
daloko far, distant (adv.)
dešć rain
dług guilt, debt
dłujki long
domk house, home
dŕěś to tear, rip
drjewo wood
droga street, way
droga dear; expensive (fem.)
droge nom. sing. neuter of *drogi*
drogi dear; expensive (masc.)
droze loc. sing. of *droga* (street)
drožd'eje yeast
dŕžaś to tremble, quake
dub oak

farań pastor

gibaś to move, stir
gjardło throat
gjarsć handful
gła variant of *jegła*
glědaś to see, look, glance
gołub pigeon, dove
gołubja gen. sing. of *gołub*
gora mountain, hill
gorki bitter (masc.)
goru acc. sing. of *gora*
gosć guest
gośća gen. sing. of *gosć*
gośći nom. plural of *gosć*
gozdź nail
gozdźa gen. sing. of *gozdź*
gozdźe nom. plural of *gozdź*
gozdźik little nail, tack
granica border, boundary
graś to play
grimaś to thunder, rumble
gwězda star

hynak otherwise
hyny other, different (arch.)
hyś to go
hyšći yet

chart bloodhound
chojźiś to go, walk (habitually)
chyliś to incline, bend

jabłuko apple
jacmjeń barley
jagnje lamb
jastśeb hawk
jazor or *jazoro* lake
jegła nail (of pine, spruce, etc.)
jědro kernel
jěza food, mealtime
jězyk tongue, language
jucha liquid manure

k to, toward (preposition + dat.)
kidaś to pour out
kjałbas sausage
kjarcma tavern
kjarmiś to feed, fatten
klěcaś to limp
klěkaś to kneel
klěś to curse, swear
kněz Mr.
kolaso wheel, bicycle
koleno knee
konja gen. sing. of *koń*
konop hemp
koń horse
końc end, tip
końck dim. of *końc*
kosć bone
kośeł kettle, cauldron
kozoł goat (male)
krotki short (masc.)
kšajaś to slice (bread)
kšawy bloody (masc.)
kšej blood
kšet mole
kšyś to cover
kšyśe covering, roof
kšyśo variant of *kšyśe*
kśasaś to strike (a light, fire)
kśebjat back, spine
kśebjata gen. sing. of *kśebjat*
kśemjeń flint
kšěn horseradish
kšěś to want, wish
kśidło wing
ku variant of *k*
kwět flower, blossom

łakomnik one fond of delicacies
łdza tear
łojś to catch
łokś elbow
łono lap, flap (of a skirt), armful
łoski Latin, Romance

lan *flax*
law lion
lažaś to lie down
lažčejšy easier, lighter (masc.)
leśeś to fly
lěkař doctor, physician
lěs forest
lěto year
lico cheek
lipa linden tree
lod ice
lud people

małučki tiny (masc.)
marchwej carrot
marchwje gen. sing. of *marchwej*
marznuś to feel cold, be frozen
mech moss
mě name
měra measure, standard
měriś to measure, estimate
měř 2nd pers. sing. imperative of *měriś*
měso meat
měšćan urban dweller
mězdze loc. sing. of *mězga*
mězga juice, sap
měź copper
mimo over, past, in front (preposition + acc., adv.)
mjasec month; moon
mjaza border, dividing line
mjelcaś to be silent
mjeńšy smaller, less
mjod honey
mlaś to grind
mloce loc. sing. of *mloko*
mloko milk
moc to be able, can
modliś to pray
morjo sea, ocean
mrěś to die
mroz frost, hoar frost
mudry wise, clever (masc.)
mucha fly
muchy gen. sing. and nom. plural of *mucha*
muše loc. sing. of *mucha*
mydło soap
myśe process of washing, bath
myśo dial. variant of *myśe*

Němc German

němy dumb, mute
nisko low (adv.)
niś thread
njaseśo 2nd pers. plural of *njasć*
njasć to carry, bear
njasu 1st pers. sing. of *njasć*
njebjo heaven
njeźela Sunday
noc night
nocy gen. sing. and nom. plural of *noc*
noga foot, leg
nogi gen. sing. and nom. plural of *noga*
nokś fingernail
noze loc. sing. and nom. dual of *noga*

pałkaś to rinse
pałny variant of *połny*
paliś to burn
paliśo 2nd pers. plural of *paliś*
pas belt, girdle
pěta heel
pcha flea
piju 1st pers. sing. of *piś*
pisaś to write
pišośo 2nd pers. plural of *pisaś*
piś to drink
pjac to bake, roast
pjakarja gen. sing. of *pjakaŕ*
pjakaŕ baker
pjaku 1st pers. sing. of *pjac*
pjas dog
pjelniś arch. for *połniś*
pjenjeze money
pjero feather; pen
płonina plain, flatlands
płot hedge
plasć to knit
pletł 3rd pers. sing. masc. perfect participle of *plasć*
pletu 1st pers. sing. of *plasć*
pluwaś to spit
pod under (preposition + acc. or instr.)
połkaś variant of *pałkaś*
połniś to fill
połny full (masc.)
polo field
popjeł ash
posoł messenger
praś to beat, thrash
prěcny crosswise
prědk front, foreground
prědny first, foremost
proch dust
prose piglet
proše loc. sing. of *proch*
pšawem loc. sing. of *pšawy*
pšawo right side; law
pšawy right, correct, real (masc.)
pšosty direct, simple (masc.)
pšosyś to ask, beg
pśed before, in front of (prep. + acc. or instr.)
pśedaś to sell
pśez over (prep. + acc.)
pśěsć to spin
pśi by, at, near (prep. + loc.)
pśijaśel friend, supporter
ptašk bird
pušćaś to release, let go
pyŕ couch grass
pytanje search, quest

radło wooden plough
ramje shoulder
rdžaś dial. variant of *držaś*
rež rye
rěd row, order
rěka river, stream
ricaś to roar, bellow
rjemjeń strap, thong
rješaz chain
rjobło rib
rjobro variant of *rjobło*
rosć to grow
rowny even, equal, level (masc.)
rubaś to hew, chop
rubju 1st pers. sing. of *rubaś*
ruce loc. sing. of *ruka*
ruka hand
rukajca mit, glove
ruki nom. plural of *ruka*
ržaś dial. variant of *držaś*

sad fruit
sajźiś to plant, set down
sarna doe
saźe loc. sing. of *sad*
segnuś to reach out
sejźeś to sit down
seno hay
skocyś to jump
skok jump, hop
słodki sweet (masc.)
słup column, pillar

słyńco sun
soń sleep, dream
sotša sister
srědny central, mid (masc.)
stajiś to place, set, build
staršy older (masc.)
strěś to wipe out, off
strona side, region
stšuchliś to despair, be despondent
stšěcha roof, eaves
stšěliś to shoot
stšigaś to shear
śćažka path
śćina reed, rushes
śćogno haunch, hip
swajźba wedding
sweca light
swěty holy, sacred (masc.)
sylny strong (masc.)
syrota orphan

šejc shoemaker, cobbler
škrja spark
šćerba notch, gap
šćěriś to show one's teeth, laugh mockingly
šćodro generously
šćotka brush
šyja neck
šyś to sew

šańki thin, slender (masc.)
šele calf
šeleta nom. plural of *šele*
šěgaś to pull, drag
šěgnuś perfective of *šěgaś*
šěło body
šěle loc. sing. of *šěło*
šěžko different, hard, heavy (adv.)
šicho quietly
šma darkness
šopły warm (masc.)
šota aunt

targaś variant of *tergaś*
tebje gen.-dat.-acc. and loc. of *ty*
tergaś to tug, pluck
tłuc to push, stamp, crush
tłusty thick (masc.)
trěś to rub, wipe
tšadaś to suffer want, starve
tšach fear, terror
tšawa grass
tšocha bit, small piece
tšuba pipe, tube
tšugaś to scrape, rasp, turn (as on a lathe)
tśeśi third (masc.)
tśěska splinter
tśěsć to shake
tśmjeń stirrup
twardy hard, firm (masc.)
ty you (sing.)

wałma wool
warjecy boiling
wezmu 1st pers. sing. of *wześ*
wěriś to believe, trust
wjacor evening
wjadł 3rd pers. sing. masc. past of *wjasć*
wjas village
wjasło oar
wjasoły happy, merry
wjasć to lead
wjaža entrance hall
wjedro weather
wjelk wolf
wjerba willow
wjerch peak, top, high point
wjeźeš 2nd pers. sing. of *wjasć*
włocyś to drag, harrow
włos hair
wlac to drag, trail, carry, whet
wobjed dinner
wogeń fire
wognišćo site of a fire, burned site
wojca sheep (sing.)
wojś to go back, return
wokno window
woko eye
wołaś to call
wolša alder
wono it
woraś to plough
woset thistle
woseta gen. sing. of *woset*
wosk *wax*
woski nom. plural of *wosk*
wosoł donkey
wostśiś to sharpen
wosyca type of poplar
wotšy sharp (masc.)
wows oats
woz cart, waggon
wozyś to haul
wóda water

wrjod swelling, boil
wrjos heather
wšen all (masc. sing.)
wšo neuter sing. of *wšen*
wuda hinge
wudra otter
wucho ear
wugoŕ eel
wulica street
wunjasć to carry out
wupiś to drink up, out
wusčejšy narrower (masc.)
wusoki high (masc.)
wutšoba heart
wuzda bridle
wuž snake

zajety captive, one imprisoned
zbožo cattle
zdźełaś perfective of *źełaś*
zeba finch
zemi loc. sing. of *zemja*
zemja land, earth, soil
zerno grain, kernel
zewaś to yawn
znamje sign, symbol
znamjenja nom. plural of *znamje*
zwěrje beast, wild animal
zyma cold, winter

žerź pole, staff
žeś to reap
žłob manger, trough, gutter
žołty yellow (masc.)
žołw turtle
žołź acorn
žona woman, wife
žrěbc colt, foal
žrědło source, spring
žrěś to guzzle, gulp down
žycyś to wish, be of good will
žyś to live
žywjenje life

źaržaś to hold, keep
źaseś ten
źeń day
źewjeś nine
źěd good-for-nothing, beggar
źěłaś to do, work
źiwaś se to wonder, be amazed
źiwy wild (masc.)

UKRAINIAN

batih whip
batožyty to whip, flog
bedro thigh
bereh shore, beach
berez gen. plural of *bereza*
bereza birch
bérezi loc. sing. of *bereh*
bičnyj lateral
bik side
bje 3rd pers. sing. of *byty*
bloxa flea
blyščaty to shine
blysk bright reflexion, brightness
Boh God
boloto mad
boroda beard
borošno flour
Bože voc. sing. of *Boh*
bryzkaty to spray, spatter
bud' 2nd pers. sing. imperative of *buty*
buty to be
byčok dim. of *byk*
byk bull
byty to hit

čerevo belly
černec' monk
čern' mob
černyc'a blackberry
čerpaty to scoop, draw
červjak worm, grub
červonyj red
čest' honour
cidylo strainer
cidyty to strain
cilyj whole, entire
cina price
cip flail
civa bobbin
civka dim. of *civa*

člen member
čolo forehead
čoloviče voc. sing. of *čolovik*
čolovik man, husband
čornyj black (adj.)
čort devil
čovnyk boat, small craft
čužyj foreign
cvit flower, blossom
čyj whose

den' day
derevce little tree
des'at' ten
deševo cheaply
dobryj good (adj.)
doroha road, street
dorohi nom. plural of *dorohyj*
dorohyj dear
došci loc. sing. of *doška*
doščovytyj rainy
doška board
dovh debt
drižđži yeast
druh friend
družnij friendly
dryžaty to tremble, shiver
dubok oak (dim.)
duša soul
duši nom. plural of *duša*
dušy loc. sing. of *duša*
dveri door
dvermy instr. plural of *dveri*

hirkyj bitter (adj.)
hlytaty to swallow, gulp
hniv anger, rage
holiv gen. plural of *holova*
holka needle
holova head
holub pigeon
hora mountain
horamy instr. plural of *hora*
horlo throat
horod town (arch.)
horox peas
horoža enclosure
hostryj sharp
hra game, play
hranyc'a border
hranyceju instr. sing. of *hranyc'a*
hraty to play
hrišok small sin
hrymity to thunder, rumble
hryšče playground

ihla dial. for *holka*
ihra variant of *hra*
ihraška plaything, toy
ihraty variant of *hraty*
ihryšče variant of *hryšče*
il loam
inšyj other, different
iskra spark

jabluci loc. sing. of *jabluko*
jabluko apple
jačmen'a gen. sing. of *jačmin'*
jačmin' barley
jaha same as *jaz'a*
jahn'a lamb
jajce egg
jakomoha as much as possible, to the best of one's abilities
jasen type of maple
jasin' variant of *jasen*
jasla manger
jaz'a witch
jazyk tongue, language
jeho dial. for *joho*
jila 3rd pers. sing. fem. past of *jisty*
jim 1st pers. sing. of *jisty*
jisty to eat
jizdyty to ride (habitually)
jižđžu 1st pers. sing. of *jizdyty*
joho him, his, its
junak young man, youth
juška broth

kamen'a gen. sing. of *kamin'*
kamin' stone
kin' horse
kist' bone
kist'u instr. sing. of *kist'*
kit cat
kl'asty to swear
klen maple
klynu 1st pers. sing. of *kl'asty*
kn'ahyn'a princess
kn'az' prince
kn'az'a gen. sing. of *kn'az'*
kn'azem instr. sing. of *kn'az'*
kn'azivstv gen. plural of *kn'azivstvo*
kn'azivstvo dukedom, principality
knyha book
knyžka dim. of *knyha*
koloss'a heads (of grain)

kolotyš 2nd pers. sing. of *kolotyty*
kolotyty to stir up, disturb
kon'a gen. sing. of *kin'*
konem instr. sing. of *kin'*
koni loc. sing. of *kin'*
kony dial. for *koni*
korčma tavern
korotki nom. plural of *korotkyj*
korotkyj short
korovyna little cow
kostej gen. plural of *kist'*
kota gen. sing. of *kit*
kovbasa sausage
kozel goat, buck
kožusi loc. sing. of *kožux*
kožušok dim. of *kožux*
kožux sheepskin coat
krov blood
krovju instr. sing. of *krov*
kruh circle, ring
kružyty to circulate
krynyc'a well, spring
kryšyty to crumble
kryvavyj bloody (adj.)
kupl'u 1st pers. sing. of *kupyty*
kupyty to buy, purchase
kvit flower
kvitka flower, blossom (dim.)

lakomyj greedy
ledu W Ukr dial. for *l'odu*
lehkyj light, easy
len W Ukr dial. for *l'on*
lev lion
lid ice
likar doctor
likar'a gen. sing. of *likar*
likot' elbow
lito summer
l'odu gen. sing. of *lid*
l'on flax
l'onu gen. sing. of *l'on*
lovec' hunter
l'ubl'at' 3rd pers. plural of *l'ubyty*
l'ublenyj loved (adj.)
l'ubyty to love
lyc'a nom. and acc. plural of *lyce*
lyce face
lypkyj sticky
lys fox
lysyj bald (adj.)

mavp'ačyj monkeylike, apish
med honey
mertv'ak corpse
meža boundary, marker
mid' copper
midd'u instr. sing. of *mid'*
mij my
mis'ac' moon; month
miščanyn townsman
mizka pulp
mizku gen. sing. of *mozok*
mjaso meat
močy W Ukr dial. for *mohty*
mohty to be able
moločko dim. of *moloko*
moloko milk
molot hammer
moloty to grind, pound
molytys'a to pray
mor'a gen. sing. of *more*
more sea
morhaty to wink
morkva carrot
morkv'anyj adj. form from *morkva*
moroz frost
mor'u dat. sing. of *more*
moryty to starve; to exhaust
movčaty to keep silent, be quiet
mox moss
mozku variant of *mizku*
mozok brain
mozol' callous
mučyty to torture; to hound
mudryj smart, wise
musi loc. sing. of *muxa*
muxa fly
myju 1st pers. sing. of *myty*
mylo soap
myty to wash

namet tent
nas us
nedokrivja lack of blood
nedokrovja variant of *nedokrivja*
nesla 3rd pers. sing. fem. past of *nesty*
nesty to carry, bear
nič night
ničč'u instr. sing. of *nič*
nis nose
nis masc. sing. past of *nesty*
nіž knife
nočej gen. plural of *nič*
noči gen. sing. and nom. plural of *nič*
noha leg
nozi loc. sing. of *noha*
noža gen. sing. of *nіž*

noži nom. plural of *niž*

ocet vinegar
odyn one
oko eye
olen' deer, stag
orel eagle
oseter sturgeon
osin' autumn, fall
osyka poplar
otec' father
oves oats
ovoč fruit
oželed' glare ice
ozero lake

palec' finger
pamoroz permifrost
pastuše voc. sing. of *pastux*
pastux shepherd
pečy W Ukr dial. for *pekty*
pekty to bake
pen' stump (of a tree)
perečyty to deny
perednij front, foremost (adj.)
pes dog
pič oven
pjat' five
pju 1st pers. sing. of *pyty*
plačenyj paid
plaču 1st pers. sing. of *platyty*
platyty to pay
pleče shoulder
plela fem. sing. past of *plesty*
plesty to knit, braid
pl'uvaty to spit
plysty to swim
počka pit (in fruit; arch.)
pojas belt, girdle
polotno cloth
polova chaff
poperečnyj crosswise; diagonal
popil ash
por'adok order
postil' bedding
povst' felt
pravda truth
pr'aža yatn
prošu I beg, ask
pryhod gen. plural of *pryhoda*
pryhoda adventure
pšono millet
pyj 2nd pers. sing. imperative of *pyty*
pyščaty squeal
pyty to drink
pyvce small drink of beer

ralo plough
ramja shoulder
ridnyj native, one's own
riz'b'ar sculptor
rizka branch, switch
robota work
rosty to grow
rot mouth
roztorž'a closing of a market day
ruci loc. sing. of *ruka*
ručka hand (dim.)
ručyty to guarantee
rudyj reddish in complexion
ruka hand
ryba fish
ryty to dig

sadženyj planted
s'ahaty to reach
selezen' drake
selezinka spleen
semyj W Ukr dial. for *s'omyj*
serednij middle, central
serp sickle
šesty gen. of *šist'*
šestyj W Ukr dial. for *šostyj*
sil' salt
sim seven
siryj dark-gray
šist' six
skazaty to say
škirytys'a to grin
skupyj stingy, miserly
slivce small word
sl'oza tear
slyza dial. for *sl'oza*
smišnyj funny, ridiculous
smix laugh, laughter
šolom helmet (arch.)
s'omyj seventh
son dream
soročka shirt
šostyj sixth
šov seam (arch.)
spann'a sleeping
spl'at' 3rd pers. plural of *spaty*
spysaty to write down
staruška dim. of *staruxa*
staruxa old lady
stavl'at' 3rd pers. plural of *stavyty*

stavyty to place
sterehty to guard, protect
sterih masc. sing. past of *sterehty*
stih stack
stil table
stižok dim. of *stih*
storin gen. plural of *storona*
storona side
strisi loc. sing. of *strixa*
strixa thatch
stryčy W Ukr dial. for *stryhty*
stryhty to cut hair
sudd'a judge
sudyty to judge
sudžu 1st pers. sing. of *sudyty*
sušyty to dry
suxi nom. plural of *suxyj*
suxyj dry
sv'ato holiday
sviča candle
svitel gen. plural of *svitlo*
svitlo light
šyja neck
synij blue (adj.)

t'ahnuty to pull
t'ažko heavy (adv.)
terebyty to peel; to husk
tilo body
titka aunt
t'm'anyj foggy
torh market, trade
torhivl'a trade
trepeču 1st pers. sing. of *trepotity*
trepotity to shake, tremble
tretij third
try three
tryvoha alarm, panic
tverdyj hard, difficult

ubyty to kill
učora yesterday
učyty to teach, instruct
udova variant of *vdova*
unuk grandson
uprava administration
usunuty to remove, eliminate
utroba womb
uzda bridle

vas you (plural)
vbyty variant of *ubyty*
včora yesterday
včyty variant of *učyty*
vdova widow
večer gen. plural of *večer'a*
večer'a supper
večir evening
vela fem. sing. past of *vesti*
velyčaty to glorify
velykyj great
verba willow
verču 1st pers. sing. of *vertity*
veres heath, fern
vereščyty to scream, shriek
veresk scream
vereteno spindle
vernuty to return
veršyty to top off, terminate
vertity to twist, drill
verx top
verxivja summit, highest point
ves', vs'a, vse all (pronoun)
vesill'a wedding
vesty to lead
vid from
vin he
vinec' wreath
vira faith
vis' axle
visim eight
visk wax
vist' bit of news
vistej gen. plural of *vist'*
vivc'a sheep (sing.)
viz waggon
vjazaty to tie, bind
vnesty to bring in
vnuk grandson
vohnyšče fireplace, flaming
vohon' fire
voločy W Ukr dial. for *volokty*
volokty to drag
voron crow (masc.)
voron gen. plural of *vorona*
vorona crow (fem.)
voš louse
voščyna bees' wax
vovk wolf
vozyty to haul
vožu 1st pers. sing. of *vozyty*
vprava exercise
vseho W Ukr dial. for *vs'oho*
vs'oho gen. sing. of *ves', vse*
vsunuty to insert, slide into
vudka hook and line for fishing
vuhor eel
vulyc'a street
vusi loc. sing. of *vuxo*

vuxo ear
vuzda bridle
vuz'ko narrow (adv.)
vyjiždženyj worn-out by travelling; broken in, trained
vyr whirlpool
vysyxaty to become dry, dry up
vyty to howl; to twist, wind
vyxid exit
vyxodženyj worn-out by walking

xodyty to walk, go (habitually)
xodyš 2nd pers. sing. of *xodyty*
xodyt' 3rd pers. plural of *xodyty*
xodžu 1st pers. sing. of *xodyty*
xolod cold
xomut stirrup (harness)
xrebet spine
xrebta gen. sing. of *xrebet*
xrest cross
xrestyty to baptize
xrystyty variant of *xrestyty*
xvorost dry firewood; windfall

žabjačyj froglike
zajec' rabbit
žalo sting (of a bee, wasp, etc.)
zbiže W Ukr dial. for *zbižž'a*
zbižž'a grain
zbyty to nail together, fasten
zdorovja health
zeml'a earth, ground, soil
zemleju instr. sing. of *zeml'a*
zemli loc. sing. of *zeml'a*
zemly dial. for *zemli*
ženytys'a to marry
žerelo source; spring
zerno grain (of wheat, sugar, sand, etc.)
zibju 1st pers. sing. future of *zbyty*
zmjaknuty to go or become soft, soften
znann'a knowledge
žolob manger
zolotiš 2nd pers. sing. of *zolotyty*
zoloto gold
zolotyty to gild
žolud' acorn
žonatyj married
žovč bile, ill will
žovtity to turn yellow
žovtyj yellow
zsadyty to set down
zšyty to sew together
zvir wild beast
zviryty to trust, confide
zvizda star
zvjazaty to tie, bind
zymivl'a place for wintering
žytt'a life
žyty to live

RUSSIAN

baba woman
ban'a bath house
bane loc. sing. of *ban'a*
bedro hip
bej hit (imperative sing. of *bit'*
bel white (short form)
belyj white
bereg bank, shore
ber'oza birch
blesnut' to flash, shine
bl'udce saucer
b'odra nom. plural of *bedro*
bojec fighter
boloto marsh, swamp
boroda beard, chin
borodka dim. of *boroda*
boronovat' to harrow
borozda furrow
b'oru 1st pers. sing. of *brat'*
brat brother
brat' to take
brov' eyebrow
brusnika red bilberries, cranberries
bud' 2nd pers. sing. imperative of *byt'*
budu 1st pers. sing. of *byt'*
bur'a storm
byt' to be

častokol palisade, fence
čej whose
čelo forehead
celyj whole, entire (adj.)
cena price, cost
cerkov' church
čern' mob, common people
černec monk
černika bilberry, whortleberry, huckleberry
čistyj clean
člen member
čǫla nom. plural of *čelo*
čǫln small boat, canoe

čǫrnyj black (adj.)
čužoj foreign (adj.)
cvet flower, blossom
cykat' to chirp (of young chicken's)
cypl'ata nom. plural of *cypl'onok*
cypl'onok baby chick

dajom 1st pers. plural of *davat'*
dajoš 2nd pers. sing. of *davat'*
dal'okij far (adj.)
davat' to give
den' day
denno daily
derevco tree
des'at' ten
dešǫvyj cheap (adj.)
divno amazing (adj.)
dobryj good
dolg duty, debt
dolžnik debtor
dolžnika gen. sing. of *dolžnik*
dolžnyj due (adj.)
dom house
dorógа road
dorogá dear; costly (short form)
d'oševo cheaply
dostoin honourable (short form)
dostoinstvo dignity, merit, worth
drožat' to tremble, shiver
drožži yeast
dub oak
dve two (fem.)
dvigat' to move, set forth

galka jackdaw
gal'ka pebble
galki nom. plural of *galka*
gal'ki nom. plural of *gal'ka*
glasnyj public, evident
glava chapter, head of state
glotat' to swallow
goloden hungry (short form masc.)
golodnyj hungry (long form masc.)
golova head
golub' pigeon
gorami instr. plural of *gora*
gorlo throat
gor'kij bitter (masc. sing.)
gorod city
gostepriimnyj hospitable
grad town
granica border, boundary
granicy gen. sing. and nom., acc. plural of *granica*
grebu 1st pers. sing. of *gresti*
gremet' to thunder
gresti to row
grešnica sinner (fem.)
grešok dim. of *grex*
grex sin

id'ot 3rd pers. sing. of *idti*
idti to go
igla needle
igloj instr. sing. of *igla*
igo yoke
igolka small needle
igrat' to play
il mud
imet' to have
imja name
inoj other, different
išču 1st pers. sing. of *iskat'*
iskat' to seek (imperf.)
ist'azat' to put on the rack, torture
ix their, theirs
iva willow
iz from, out of
izba hut; shack

jabloko apple
jagn'ata nom. plural of *jagn'onok*
jagn'onok lamb
jaic gen. plural of *jajco*
jajco egg
jaknut' to moan (dial.)
jazyk tongue, language
jego his
jel masc. sing. past of *jest'*
jemu dat. sing. of *on*
jest' to eat
jezdit' to ride, travel (habitually)
jezžu 1st pers. sing. of *jezdit'*
junoša young man

kem instr. sing. of *kto*
kislyj sour
klenu I swear
klikat' to call
kl'uč key
kn'agin'a princess
kn'az' prince
knižek gen. plural of *knižka*
knižka book, a little book
kolbasa sausage
kolence knee (dim.)
koloda log; clog
kon' horse
korčma tavern
korol' king
korotko shortly
kost' bone
kost'ju instr. sing. of *kost'*
kot cat (male)
koz'ol goat
kožux sheepskin coat
kožuxa gen. sing. of *kožux*
kožuxe loc. sing. of *kožux*

kraj border, end
kratkij short
kriča while shouting (adv. participle)
kroju 1st pers. sing. of *kryt'*
krošit' to crumble
krov roof; shelter
krov' blood
krovavyj bloody
kryt' to cover
kto who
kupec merchant, dealer
kut corner

l'agušonok young frog
lakomyj sweet-toothed, fussy (about food)
lampa lamp
les forest
lesa nom., acc. plural of *les*
leto summer
lico face
lisà fox
livm'a in torrents (adv.)
l'od ice
l'ogkij light (adj.)
lokot' elbow
l'on flax
lošad' horse
lošadej gen. plural of *lošad'*
lovec hunter
l'oža lying down (adv. participle)
l'stec flatterer
l'ubov' love
l'ubvi gen. sing. of *l'ubov'*

m'aso flesh, meat
mat mate (chess term)
mat' mother
m'at past participle passive of *m'at'*
m'at' to knead
med' copper
mednyj copper (adj.)
meret' to die
mes'ac month; moon
metla broom
mex fur; sack
mexi bellows
meža boundary
mlečnyj milk (adj.), milky
moč' to be able
m'od honey
mogu 1st pers. sing. of *moč'*
moj my, mine
moju 1st pers. sing. of *myt'*
molčat' to be silent
molit's'a to pray
moloko milk
molot' to grind, mill
molotka gen. sing. of *molotok*
molotok hammer
morgat' to blink, wink
moroz frost
m'ortvyj dead
mošču 1st pers. sing. of *mostit'*
mostit' to bridge, pave, floor
m'otly nom. plural of *metla*
mox moss
možet 3rd pers. sing. of *moč'*
mstit' to avenge
mudr -a, -o wise (short forms)
mudr -yj, -aja, -oje wise (long forms)
mukà flour
muška dim. of *muxa*
muxa fly
muxe loc. sing. of *muxa*
mylo soap
myt' to wash
myt'jo washing

najom rental
nalagat' to lay on, impose
naslednik heir, inheritor
nel'z'a impossible (adv.)
nesla fem. sing. past of *nesti*
nes'om 1st pers. plural of *nesti*
nes'oš' 2nd pers. sing. of *nesti*
nes'ot 3rd pers. sing. of *nesti*
nes'ote 2nd pers. plural of *nesti*
nesti to carry
nesu 1st pers. sing. present of *nesti*
noč' night
noga leg, foot
noge loc. sing. of *noga*
nogi nom. plural of *noga*
nos nose
n'os masc. sing. past of *nesti*
nosila fem. sing. past of *nosit'*
nosit' to carry
nošu 1st pers. sing. of *nosit'*
nož knife
nožen'ka dim. of *noga*
nožka dim. of *noga*

ob''jom capacity
obxodit' to go one's round; to overtake
odin one (masc. sing.)
odno one (neuter sing.)
od'oža clothing (coll.)
ogon' fire
oko eye
olen' deer
ol'xa alder
or'ol eagle
osen' autumn
os'otr sturgeon
ostryj sharp
otcy nom. plural of *otec*

otec father
otricat' to deny
otygrat' to win back, to play out
ovca sheep (sing.)
ovcy gen. sing. of *ovca*
ovošč vegetable
ov'os oats
ozero lake
oželedica glazed frost

palec finger
p'at gen. plural of *p'ata* (heel)
p'at' five
p'atnica Friday
pčela bee
peč' to bake
pej 2nd pers. sing. imperative of *pit'*
peki 2nd pers. sing. imperative of *peč'*
pen' stump
penije singing
peret' to press, jostle, push forward
perevedena removed, transferred (fem.)
per'ja nom. plural of *pero*
pero feather
pervyj first (masc. sing.)
pet' to sing
pisat' to write
piščat' to squeak
pišet 3rd pers. sing. of *pisat'*
pišu 1st pers. sing. of *pisat'*
pit' to drink
p'ju 1st pers. sing. of *pit'*
plašč coat
plečo shoulder
plesti to braid, weave
plevat' to spit
pl'ol masc. sing. past of *plesti*
plot' flesh, body
plotnyj compact, dense, stout
počka bud
pod under (prep. + acc. or instr.)
pogibat' to perish, be lost
pojas belt, girdle
poješ 2nd pers. sing. of *pet'*
poju 1st pers. sing. of *pet'*
p'ok masc. sing. past of *peč'*
pol'a nom. plural of *pole*
pole field
polnyj full, complete
pol'za use; benefit
pomoč' to help, assist
pomogi 2nd pers. sing. imperative of *pomoč'*
pon'atije concept
p'or masc. sing. past of *peret'*
por'adok order
p'os dog
poxodil masc. sing. past of *poxodit'*
poxodit' to take a walk
požirat' to devour
prijom reception
pril'nut' to adhere to
prin'at' to receive
pros'ba request
pryšč pimple
pšenica wheat
pšeno millet
put' way, road
putej gen. plural of *put'*

r'abina mountain-ash; pock-mark
rabota work
rabotnica workwoman
rad glad, happy (short form)
r'ad row, range, line
ralo primitive plough
rassypat' to scatter, spread
rasti to grow
rdet' to turn red
rebro rib
reč' speech
reka river, stream
r'obra nom. plural of *rebro*
rod race, stock, family
rodnoj native, own
rossyp' scattered pile, disorder
rost stature, size, height
rot mouth
roždenije birth
ručka dim. of *ruka*
ruda ore
ruka hand
rukav sleeve
ruke loc. sing. of *ruka*
ruki nom. plural of *ruka*

sbit' to beat
sčast'je happiness
sedlo saddle
šej 2nd pers. sing. imperative of *šit'*
šeja neck
sel'co dim. of *selo*
selez'onka spleen
selo settlement
sem' seven
serdce heart
serp sickle
seryj grey
sestra sister
sila strength, power
sinij blue
šit' to sew
skup, -a, -o stingy (short forms)
skup -oj, -aja, -oje miserly, stingy (long forms)
sladkij sweet
slepyj blind
slepyje nom. plural of *slepyj*
sleza tear

slezt' to descend, climb off
slovco dim. of *slovo*
slovo word
služit' to serve
služu 1st pers. sing. of *služit'*
slyšat' to hear
smert' death
sm'otana cream (dial.)
sna gen. sing. of *son*
sneg snow
snizit' to lower
sol' salt
solnce sun
son sleep
s'ostry nom. plur. of *sestra*
soxa primitive plough
sova owl
span'jo sleeping, sleep
sšit' to sew together
stan stature, size, height
stan' 2nd pers. sing. imperative of *stat'*
starec old man
staryj old
stat' to stand up, get up, rise
stav' 2nd pers. sing. imperative of *stavit'*
stavit' to put, place
stavl'u 1st pers. sing. of *stavit'*
stega dial. for *stez'a*
stez'a path
stol table
stolb pole, pillar
stoly nom., acc. plural of *stol*
strem'a stirrup
sud court; trial
sudit' to judge
suxoj dry
sužd'onnyj judged (past participle)
suženyj fiancé (masc.)
sužu 1st pers. sing. of *sudit'*
sv'azat' to tie, to bind
sveča candle
sv'erit' to check
syp' 2nd pers. sing. imperative of *sypat'*
sypat' to pour (sand, grain, salt, etc.)
sžeč' to burn
sžǫg masc. sing. past of *sžeč'*

t'agat's'a to plead, be at law
tainstvennyj mysterious
tainstvo sacrament
tajen short form of *tajnyj*
tajnyj secret (adj.)
t'anu 1st pers. sing. of *t'anut'*
t'anut' to draw, pull
tebe dat. sing. of *ty*
tel'ata nom. plural of *tel'onok*
tel'onok calf
teret' to rub
terpet' to bear, to endure
tkat' to weave
tk'ot 3rd pers. sing. of *tkat'*
t'ma darkness
tolkat' to push, shove
t'omnyj dark
t'oplyj warm
torg bargain, sale, market
t'ošča mother-in-law
tr'apka duster, rag
tr'apki nom. plural of *tr'apka*
trava grass
trepešču 1st pers. sing. of *trepetat'*
trepetat' to tremble, quiver
tretij third
trevoga anxiety, disturbance
tugoj tight, solid, stiff
tverd' firmament
tv'ordo firmly
tv'ordyj hard, solid

ubeždenije conviction, persuasion
učenije learning, study
uda hook, fishhook
udka fishing rod
ugor' eel
ulica street
utroba belly, abdomen
uxa fish soup
uxo ear
uzda bridle

vbit' to beat, nail
vela fem. sing. past of *vesti*
veli 3rd pers. plural of *vesti*
vera faith
vereteno spindle
verx top, summit
ves' all, whole (masc.)
vesti to lead
vizžat' to squeak, scream
v''jexat' to drive in
vl'ubl'onnyj in love with
voda water
vojenno militarily
vojna war
volk wolf
volna fleece
vorog enemy
vorona crow
vorotit' to return
voš' louse
vosklicat' to exclaim, shout
voz waggon
vs'a all, whole (fem.)
vs'o all, anything, everything
vteret' to rub in
vvesti to lead in, introduce
vv'ol masc. sing. past. of *vvesti*
vynesti to carry out
vynesu 1st pers. sing. of *vynesti*

vysmatrivat' to look out for
vysmotret' see *vysmatrivat'*
vyt'anu 1st pers. sing. of *vyt'anut'*
vyt'anut' to pull out, draw forth
vyxožennyj cared for (past participle passive of *vyxodit')*
vzaimnyj mutual
vz'at' to take
vz'atije taking, capture

xitryj cunning, sly
xleb bread
xlev sty, barn
xodit' to walk, go (habitually)
xoloden cold (short form)
xolodnyj cold (long form)
xomut collar (harness)
xožu 1st pers. sing. of *xodit'*
xudoj bad
xvalit' to praise, glorify
xval'u 1st pers. sing. of *xvalit'*

zajac rabbit
zaimstvovat' to borrow
zajom loan
zales'je area beyond the forest
žalet' to regret, be sorry for
zanesla fem. sing. past of *zanesti*
zanesti to carry away, to bring
zan'os masc. sing. past of *zanesti*
zaperet' to close
žara heat
žavel' Javelle water
zdorov healthy (short form)
zdravije see *zdorov'je*
zdorov'je health
zel'onyj green
zeml'a earth, land
zeml'anika strawberry
žena wife
ženix bridegroom
zerno grain, seed
zima winter
zimov'je wintering quarters
živoj alive
zmej arch. for *zmeja*
zmeja serpent, dragon, kite
znaja while knowing (adv. participle)
žǫlč' bile
zoloto gold
žǫltyj yellow
žony nom. plural of *žena*
z'orna nom. plural of *zerno*
žrat' to devour, gabble
zver' animal
zvezda star
zv'ozdy nom. plural of *zvezda*
zžǫt 3rd pers. sing. of *sžeč'*

BELORUSSIAN

(ɣ *occupies the position of* h)

adysci to leave, go away
adzin one
aɣon' fire
akno window
alen' deer
arabina mountain ash
aržany rusty (nom. sing. masc.)
avečka sheep (dim.)
av'os oats
awtorak Tuesday
aženicca to marry
az'ory nom. plural of *vozera*

b'ada misery
b'aɣu 1st pers. sing. of *beɣčy*
balota mud (plural)
barada beard, chin
b'arę 3rd pers. sing. of *brac'*
b'areznik birch grove
b'aroza birch
b'aru 1st pers. sing. of *brac'*
bédy griefs, troubles
beɣ 3rd pers. sing. masc. past of *beɣčy*
beɣčy to run
berace 2nd pers. plural of *brac'*
beraɣ shore, bank
beraɣi nom. plural of *beraɣ*
beraze loc. sing. of *beraɣ*
bi 2nd pers. sing. imperative of *bic'*
bic' hit
bliščac' to shine
blyxa flea
brac' to take
brovy nom. plural of *bryvo*
bryvo eyebrow
buduc' 3rd. pers. plural future of *bic'*
budz' 2nd pers. sing. imperative of *byc'*
bura wind
byc' to be

c'aɣlavy liable to be taxed
c'aɣnuc' to pull, drag

c'al'a calf
čalo forehead
c'al'o variant of *c'al'a*
cana price
canic' to price
čarada herd
čatyry four
c'ažka hard (adj.)
c'ažkavaty somewhat hard, difficult (nom. sing. masc.)
cęly whole, entire (nom. sing. masc.)
cen' shadow
cęniš 2nd pers. sing. of *canic'*
čęrn' common people
čęrpac' to draw, scoop
čoló SW dial. for *čaló*
c'omny dark (nom. sing. masc.)
c'oply warm (nom. sing. masc.)
čorny black (nom. sing. masc.)
čǫrt devil
čuży foreign, other's (adj.)
cvet blossom
cv'ordy hard (nom. sing. masc.)
čyj whose (nom. sing. masc.)
čyjo whose (nom. sing. neuter)
čyrvony red (nom. sing. masc.)
čysty clean (nom. sing. masc.)

daraɣi dear (nom. sing. masc.)
daroɣa road, trail
daroze loc. sing. of *daroɣa*
dn'a gen. sing. of *dzen'*
dobraɣa gen. sing. masc. and neuter of *dobry*
dobry good (nom. sing. masc.)
doščy loc. sing. of *doška*
doška board, plank, blackboard
dožd' rain
drožd'y yeast
druɣi other, second (nom. sing. masc.)
dryvotnik woodshed
dryžac' to tremble, shiver
dzed grandfather, old man
dzen' day
dzes'ac' ten
dzes'acera collective form of *dzes'ac'*
dzika wildly
dz'onny daily
dzve two (fem.)
dzvery door

ɣalava head
ɣalowny chiefly
ɣara mountain
ɣavaryc' to speak
ɣavoryš 2nd pers. sing. of *ɣavaryc'*
ɣinuc' to perish
ɣlytac' to swallow, gulp
ɣn'azdo nest
ɣn'azdzicca to nestle, build a nest
ɣn'azd'us'a 1st pers. sing. of *ɣn'azdzicca*
ɣnew anger
ɣn'ozdy nom. plural of *ɣn'azdo*
ɣolka needle
ɣolub pigeon
ɣoradam instr. sing. of *ɣorod*
ɣorb hump
ɣordy proud (nom. sing. masc.)
ɣorki bitter (nom. sing. masc.)
ɣorod city, town
ɣrac' to play
ɣranica border
ɣruša pear
ɣrymec' to thunder, rumble
ɣryva mane

iɣolka variant of *ɣolka*
iɣrac' variant of *ɣrac'*
iɣruša variant of *ɣruša*
ilɣac' to lie
il'nu gen. sing. of *l'on*
im'a name
imɣa fog
imɣla variant of *imɣa*
imša Roman Catholic Mass
imxu gen. sing. of *mox*
inšy other, different (nom. sing. masc.)
irvac' to tear, rip
irža rust
iržany variant of *aržany*
iskrypka dial. for *skrypka*
istužka ribbon
išow he went

jablyk apple
jaɣn'a lamb
jaɣn'o variant of *jaɣn'a*
jaɣo him, his
jajco egg
jamu to him
jana she
jano it
jany they
jazyk tongue, language
jel'nik fir grove
jemu dat. sing. of *jon*
jezdzic' to travel, ride (habitually)
jezdžu 1st pers. sing. of *jezdzic'*

jon he
juxa blood, gore

kascej gen. plural of *kosc'*
kawbasa sausage
kazac' to speak, say
kažaš 2nd pers. sing. of *kazac'*
kažuse loc. sing. of *kažux*
kažux sheepskin coat
kepski bad, poor (nom. sing. masc.)
kij stick
kisly sour (nom. sing. masc.)
kl'anu 1st pers. sing. of *kl'asci*
kl'any nom. plural of *kl'on*
kl'asci to curse, swear
kl'aw 3rd pers. sing. masc. past of *kl'asci*
klen'ace 2nd pers. plural of *kl'asci*
klinu 1st pers. sing. of *kl'asci*
kl'on maple
kn'az' prince
kon' horse
kosc' bone
kosc'u instr. sing. of *kosc'*
kot cat
krow blood
kryc' to cover
kryj 2nd pers. sing. imperative of *kryc'*
krynica spring, source
kryšyc' to crumble
kryvi gen. sing. of *krow*
kusok piece, morsel
kvetka flower, bloom

l'acec' to fly
l'aču 1st pers. sing. of *l'acec'*
lan' doe
l'asnik forester
lekar physician, doctor
lekara gen. sing. of *lekar*
les forest
lesniki nom. plural of *l'asnik*
lezci to crawl, creep
leze 3rd pers. sing. of *lezci*
l'od ice
l'oɣki light, easy (nom. sing. masc.)
lokac' elbow
l'on flax
l'ubow love
l'ubvi love (gen. sing. of *l'ubow*)
l'ud people, nation

m'adovy adjective from *m'od*
maɣčy to be able, can
majo my (nom. sing. neuter)
malacę loc. sing. of *malako*
malady young (nom. sing. masc.)
malako milk
malicca to pray
m'anuška nickname
maryac' to blink, to wink
maroz frost
m'axi nom. plural of *mex*
m'aža border
mec' to have, own
medz' copper
menavita namely
mera measure
mes'ac month; moon
meščanin townsman
mex sack
miryac' variant of *maryac'*
m'od honey
mora sea
mox moss
mozɣ brain
mša Mass
myc' to wash
myj 2nd pers. sing. imperative of *myc'*
myla soup
myš mouse
myššu instr. sing. of *myš*

naɣa foot
n'asic'o NE dial. for *nes'ace*
n'asla 3rd pers. sing. fem. past of *nesci*
n'asu 1st pers. sing. of *nesci*
naze loc. sing. of *naɣa*
nel'ɣa it is impossible
nes'ace 2nd pers. plural of *nesci*
nesci to carry
noč night
nočču night (instr.)
noɣi nom. plural of *naɣa*
nos nose
n'os 3rd pers. sing. masc. past of *nesci*
novaja new (nom. sing. fem.)
novaje new (nom. sing. neuter)

p'ac' five
pačac' to begin
p'ačy to bake
palažyc' to lay down, place
pam'ac' memory
paradak order
paras'a piglet
paras'o variant of *paras'a*
p'aty fifth (nom. sing. masc.)

pen' stump
pi 2nd pers. sing. imperative of *pic'*
pic' to drink
pisac' to write
pišam 1st pers. plural of *pisac'*
pl'ačo shoulder
pl'ala 3rd pers. sing. fem. past of *plesci*
pl'askac' to slap
pl'avac' to spit
pleče SW dial. for *pl'ačo*
plešča 3rd pers. sing. of *pl'askac'*
plesci to knit, braid
pojas belt, girdle
p'os dog
powny full (nom. sing. masc.)
prawda truth
pryneseny carried, brought
pyrxac' to flutter, fly up
pytann'a gen. sing. and nom. plural of *pytanne*
pytanne question

rabic' to work, do
rabota work, labor
raɣatac' to laugh loudly
rak crayfish, lobster
raki nom. plural of *rak*
rala primitive (wooden) plough
rall'a farm land
rasci to grow
rępa turnip
rob'ac' 3rd pers. plural of *rabic'*
ros 3rd pers. sing. masc. past of *rasci*
rot mouth
rowny straight
rozɣi switches, birch rod
ručcy loc. sing. of *ručka*
rucę loc. sing. of *ruka*
ručka little hand, handle
ruka hand
rvac' variant of *irvac'*
ryby fish (plural)
rža same as *irža*

s'ačy to cut, dice, mince
šal'ascec' to rustle
salic' to salt
s'alo village, settlement
salodki sweet (nom. sing. masc.)
s'ami gen. of *sem*
šaptac' to whisper
s'astra sister
ščaka jaw
ščodry generous (adj.)
ščoki nom. plural of *ščaka*
selo SW dial. for *s'alo*
sem seven
sena hay
šępča 3rd pers. sing. of *šaptac'*
šęsc' six
skrypka violin
skupy stingy (nom. sing. masc.)
sliza tear (dial.)
slova word
sol' salt
s'oly nom. plural of *s'alo*
s'ostry nom. plural of *s'astra*
šosty sixth (adj.)
staly nom. plural of *stol*
stol table
strala arrow
strase loc. sing. of *straxa*
straxa thatched roof
stręly nom. plural of *strala*
stužka variant of *istužka*
sud court (of law)
suddz'a judge
sudžany past participle passive of *sudzic'*
sudžu 1st pers. sing. of *sudzic'*
sudzic' to judge
suxi dry (nom. sing. masc.)
sv'ača candle
sv'aty holy (nom. sing. masc.)
šyc' to sew
šyj 2nd pers. sing. imperative of *šyc'*
šyj gen. plural of *šyja*
šyja neck

tarčac' variant of *tyrčac'*
toryɣ trade, marketplace
towsty fat (nom. sing. masc.)
trysc'o reed, rushes, cane
tryvac' to last, endure
tyrčac' to loom up, stick out

udava same as *wdava*
unuk same as *wnuk*
usmešcy loc. sing. of *usmeška*
usmeška smile
us'a all (nom. sing. fem.)
us'o all (nom. sing. neuter)
uves' all (nom. sing. masc.)

vada water
v'adu 1st pers. sing. of *vesci*
valačy to drag

v'arba willow
v'aselle wedding
v'asna spring
v'as'oly happy (nom. sing. masc.)
v'aze 3rd pers. sing. of *vezci*
večar evening
vecer wind
vedz'ace 2nd pers. plural of *vesci*
verse loc. sing. of *verx*
verx top, summit
vesci to lead
vezci to haul
vina fault
voka eye
vokny nom. plural of *akno*
voš louse
vosen' autumn
v'osny nom. plural of *v'asna*
vostry sharp (nom. sing. masc.)
v'ow sing. masc. past of *vesci*
vowčy adj. form of *vowk*
vowk wolf
vozera lake
vožyk hedgehog
vuda fishhook
vuɣor eel
vulica street
vulicy loc. sing. of *vulica*
vuxa ear
vuzdęčka bit, bridle
vyvučany learned, studied

wdava widow
wnuk grandson
ws'o same as *us'o*

xadzic' to go, to walk
xadžu 1st pers. sing. of *xadzic'*
xitry cunning (nom. sing. masc.)
xod motion, going
xodzic' 3rd pers. sing. of *xadzic'*
xryscic' to baptize

zabity killed
z'ac' son-in-law
žac' to reap
zajac rabbit
z'al'ony green (nom. sing. masc.; adj.)
žaludovy adj. form from *žolud*
žaludy nom. plural of *žolud*
z'aml'a earth, land
žanaty married (nom. sing. masc.)
žanki nom. plural of *žonka*
zbožža grain
zel'anec' to turn, become green
zelen' verdue, greenness
zm'anic' to change, alter
zm'an'u 1st pers. sing. of *zm'anic'*
žolud acorn
žonaty SW dial. for *žanaty*
žonka wife
zub tooth
zv'azda star

žyc' to live
žycc'o life

BULGARIAN

abəlka apple (dial. for *jabəlka*)
agne lamb

b'al white (masc. sing.)
be imperative sing.
bádi imperative sing. of *be*
beli nom. plural of *b'al*
bradi chins; beards
br'ag coast, shore
brašno flour
brat brother
brat'a nom. plural of *brat*
brežen adj. form of *br'ag*

c'al entire, whole
čedo child, offspring
cena price, worth
člen member
cv'at colour, complexion
cvete flower, blossom

dəlg debt
den day
dever brother-in-law
dəžd rain
dlәžni indebted (plural)
dlәžnik debtor
dobər good (masc. sing.)
*draskam** (I) scratch, claw
drašt'ə variant of *draskam*

* Since Blg no longer possesses infinitives, all verbs are cited in 1st person singular.

əgəl angle, corner
ekna (I) resound, roar
eza affliction, disease (dial.)
ezd'ə (I) travel, ride
ezdene act, process of riding, travelling
ezero lake
ezik tongue, language

gələb pigeon, dove
gərbove nom. plural of *grəb*
gərmove nom. plural of *grəm*
gərne pot, jar (of clay)
glas(ət) voice (definite form)
gložd'ə variant of *glozgam*
glozgam (I) gnaw
grad(ət) town, city (definite form)
granica boundary, border
gražđanin citizen, townsman
grəb back
greben comb, card, hackle
grəm thunder
grənci pots, pottery

il clay
ime name
inakəv different, other (masc.)
iskra spark
izmen'ə change, alter
izmenen past participle passive of *izmen'ə*

jabəlko apple
jagoda strawberry
jajce egg
jam (I) eat, devour
jasla crib, manger
jav'ə se (I) appear, show up
jəzik tongue (dial.)
juxa salty soup (arch. and dial.)
juzda rein, bridle

kažə (I) speak
kərvav bloody, blood-stained
kərvi (I) bleed
knez mayor (arch.)
kon horse
kon'ət definite form of *kon*
koren root
kožusi plural of *kožux*
kožux sheepskin coat
krəv blood
krəven adj. form of *krəv*
krəvnina bloodshed
krij 2nd pers. sing. imperative of *krijə*
krijə (I) cover
kup'ə (I) buy

lakət elbow
lakom greedy, gluttonous (masc.)
l'ato summer
len flax
lep'ə (I) stick together, glue
lepen masc. sing. past participle passive of *lep'ə*
lice face; person
l'ude people

m'asto place, locality
mažə (I) smear
mədər wise, sage (masc.)
məgla mist, fog
men'ə (I) change, alter
mesec month; moon
meso(to) meat (definite form)
mežda boundary, border
ml'ako milk
mlečen (of) milk (adj., masc.)
mol'ə (I) beg, ask, request
mor'a plural of *more*
more sea

narod(ət) people, nation (definite form)
noga foot
nos'ə (I) carry, bear, wear
nos(ət) nose (definite form)
nošt night
noze nom. plural of *noga*

ogən fire
oko eye
osika aspen
ostər sharp (masc.)
otec (ət) definite form of *otec*
otec father
ovca sheep

pamet memory
pən stump
pepel ashes
pət road, way
pieš 2nd pers. sing. of *pijə*
pij 2nd pers. sing. imperative of *pijə*
pijə (I) drink, take
pišə (I) write
pitane asking, inquiring
plač(ət) crying, wail (definite form)
plačove(te) definite plural of *plač*
plaštam imperative of *plat'ə*

plat'ə (I) pay
plel masc. sing. perfective participle of *pletə*
pletə (I) knit
pl'ujə (I) spit
pojas belt, girdle
pol'a nom. plural of *pole*
pole field
polski field (adj.)
puskam (I) let, release
puštam variant of *puskam*

r'adko seldom, rarely
ralo wooden plough
razum sense, reason, mind
red(ət) order, system (definite form)
reka river, stream
rəka hand
rod(ət) kin, family (definite form)
rog(ət) horn (definite form)

sedalo seat, chair-bottom
selce hamlet, little village
səlza tear
sən sleep
seno hay
šepa hollow of the hand, handful
šəpa variant of *šepa*
šept'ə (I) whisper
sərce heart
sever north
šija neck
sin blue (masc.)
sin son
sinət definite form of *sin*
sinove nom. plural of *sin*
sinovete definite form of *sinove*
sladək sweet (masc.)
slənce sun
smərt death
smərtnik dead man, corpse
smrətnik older variant of *smərtnik*
sn'ag snow
snežen of snow (adj., masc.)
stəklo glass
štərbav jagged, notched (masc.)
stol chair
stolət definite form of *stol*
strax(ət) fear, fright (definite form)
svat(ət) matchmaker, relative by marriage (definite form)
svešt candle

tai(j)nstven mysterious, secret
tajnstvo sacrament
tele calf
təšta mother-in-law
testo dough

učenie teaching, doctrine
učitel teacher
ulica street
uxo ear

v'atər wind
večer evening
vedə (I) lead (arch.), now used only with prefixes
vədica fishing rode
vəglišta coal
vela fem. sing. perfect part. of *vedə*
vəlci nom. plural of *vəlk*
vəlk wolf
vəlkət definite form of *vlk*
vərba willow
vətək weft, woof
vetrec breeze
vid'ə (I) see
vitez knight
viždam imperfective of *vid'ə*
vlasi nom. plural of *vlax*
vlax Rumanian
voz'ə (I) haul, convey
vrag enemy
vrazi plural of *vrag*
vrana crow
Vrəbnica Palm Sunday
vs'akak by all means, in every way
vsemogəšt almighty, all-powerful
vsički all, everyone

xl'ab bread
xleben of bread (adj., masc.)
xod'e (I) move, go
xomot yoke

zaek rabbit
zem'a earth, world
zet son-in-law
zet'ove nom. plural of *zet*
žətva harvest, crop
zid wall
zlato gold
žleb small grove
zmej dragon
zmija snake, serpent
zrənce small grain
zvezda star

SLOVENE

bál se masc. sing. of *báti se*
bârv gen. plural of *bârva*
bârva colour, dye
báti se to fear, be afraid
bẹ́da distress; poverty
bẹ́l white (short form)
bẹ́la nom. sing. fem. of *bẹ́l*
bẹ́li masc. sing. definite form of *bẹ́l*
bîješ 2nd pers. sing. of *bíti*
bilô 3rd pers. sing. neuter past of *bíti* 'to be'
bíti to hit, beat
bíti to be
bîtka battle, combat
bláto mud
bȍb broad bean
bóba gen. sing. of *bȍb*
bọ́di 2nd pers. sing. imperative of *bíti* (to be)
Bôg God
bolân sick, ill (masc. sing. indefinite form)
bolník patient, sick person
bóre Oh dear, goodness me, heavens above! (formerly the voc. sing. of *Bôg)*
bráda chin, beard
bradọ́ acc. sing. of *bráda*
brȁt brother
brât to take (supine)
bráta gen. sing. of *brȁt*
bráti to read; to gather
brẹ́g hill, slope
brẹ́za birch
bȓšč medicinal plant

cẹ́l whole, entire
céna price, worth
česáti to comb
čẹ́šeš 2nd pers. sing. of *česáti*
césta street, road
cvẹ́t blossom, bloom
členˆ joint, link
človek man, human

dalî (arch. for *dâli*) 3rd pers. masc. plural past of *dáti*
dalọ́ (arch. for *dâlo*) 3rd pers. sing. neuter past of *dáti*
dân day
dâr gift, donation
darû gen. sing. of *dâr*
dáti to give
dẽd grandfather
devẹ́r brother-in-law (husband's brother)
dȁž rain
dəžjȁ gen. sing. of *dȁž*
dȉm smoke
díma gen. sing. of *dȉm*
dlẹ́to chisel
dnȍ bottom, ground
dolžník debtor
dostọ́jen respectful
dremáti to drowse, slumber
drẹ́mlješ 2nd pers. sing. of *drẹ́mati (dremáti)*
dûh spirit, mind, intellect
dúša soul, spirit
dvâ two
dvígati to raise, hoist
dvọ́rski of the court (adj.)

gládek smooth, even (masc. indefinite form)
glâs voice, sound
gláva head, chief
góba sponge
golọ́b pigeon, dove
goltáti to swallow, gulp
gọ́r gen. plural of *góra*
góra hill, mountain
gorâmi instr. plural of *góra*
gorẹ́ nom. plural of *góra*
goré gen. sing. of *góra*
gorọ́ instr. sing. of *góra*
grâd castle
gradû gen. sing of *grâd*
grânica border, boundary
grebện comb, crest
gréda flower-bed
grẹ́h sin
grẹ́mo we go
grísti to bite, nip
grîzəl masc. sing. past of *grísti*
grízla fem. sing. past of *grísti*
gŕlo throat

hlâpec servant, farm labourer
hlẹ́v stable, sty
họ́ja walking, walk
hȍlm hill

homôt collar (harness)
hvâlca gen. sing. of *hvâlec*
hvâlec one who praises, boasts

ígla needle
imèj 2nd pers. sing. imperative of *imẹ́ti*
imẹ́ti to have, possess
ískra spark
iztégati extend, stretch out
iztẹ́zati same as *iztégati*

jábolko apple
jájce egg
jesíka poplar
jezẹ̑ro lake, sea
jẹ́za ride, journey
junák young man
jútro morning

kadîlnica censer
kájati to blame, reprimand
kȁr which, that
kdọ̑ who
kdọ́r who, that
klícati to call
kljúč key
klobása sausage
kmèt peasant
kmẹ́ta gen. sing. of *kmèt*
knẽz prince
kọ́kolj tumbleweed
koláč cake, round loaf
koláča gen. sing. of *koláč*
kȍnj horse
kọ́nj gen. plural of *kȍnj*
kónja gen. sing. of *kȍnj*
konjar ostler, groom
kọ́njski adj. form from *kȍnj*
korẹ̑n root
kọ̑s piece, morsel
kọ̑st bone
kostmí instr. plural of *kọ̑st*
kọ́t angle, corner
kọ́ta gen. sing. of *kọ́t*
kọ́ža skin, hide
kóžuh sheepskin coat
kožúha gen. sing. of *kóžuh*
krȁj end, edge, country
krája gen. sing. of *krȁj*
králj king, ruler
králja gen. sing. of *králj*
kraljev gen. plural of *králj*
kráva cow
krílo wing
kř̑t mole
krȕh bread
krúha gen. sing. of *krȕh*
kř̑v blood
krvâv bloody (masc. indefinite form)
krvjó instr. sing. of *kř̑v*
kupíti to buy, purchase
kúpljen past participle passive of *kupíti*

lakât elbow
lákati to hunger, desire
lân flax
lẹ̑s wood, lumber
lẹ̑ti instr. plural of *lẹ́to*
lẹ̑tnik yearling (calf, lamb); yearbook
lẹ́to year; summer
líce cheek, face
lípa linden tree
lîpnik variety of linden
lîpo instr. sing. of *lípa*

mâh moss
màk poppy, poppy seed
máka gen. sing. of *màk*
malína raspberry
mẹ̑d honey
medû gen. sing. of *mẹ̑d*
məglȁ mist, haze
méja boundary, limit
mèl masc. sing. past of *mésti*
méla or *métla* 3rd pers. sing. fem. past of *mésti*
mẹ̑sec month
mesọ̑ meat
mésti to sweep
mestọ̑ place, location
mẹ́šaš 2nd pers. sing. of *mẹ́šati*
mẹ́šati to mix, stir
mẹ́təl variant of *mèl*
mlâd young (masc. sing. indefinite)
mlẹ́ko milk
móči to be able, can
mọ́dri wise (long form)
mọ́ka flour; meal
molíti to pray
mọ́re 3rd pers. sing. of *móči*
morjẹ̑ sea
mọ̑ž husband
možâ gen. sing of *mọ̑ž*
možẽh loc. plural of *mọ̑ž*
možmí instr. plural of *mọ̑ž*
mrȁz cold; frost

národ nation, people
narọ́da gen. sing. of *národ*
nę́səl masc. sing. past of *nésti*
nésla fem. sing. past of *nésti*
nésti to carry, bear
nọ̑č night
nóga leg
nọ̑s nose
nosâ gen. sing. of *nọ̑s*
nósi 3rd pers. sing. of *nosíti*
nósîla 3rd pers. sing. fem. past of *nosíti*
nosíli masc. plural past of *nosíti*
nosílo neuter sing. past of *nosíti*
nọ́simo 1st pers. plural of *nosíti*
nọ́siš 2nd pers. sing. of *nosíti*
nosíti to carry, bear
nọ̑v new, fresh (masc. sing. — short form)
nȍž knife

odvzę́ti to take away, seize
okọ̑ eye
otrọ́k gen. plural of *otrȍk*
otrȍk child
óvca sheep

pȁdəl variant of *pȁl*
pádla variant of *pála*
pȁl masc. sing. past of *pásti*
pála fem. sing. past of *pásti*
pâs belt, girdle
pásti to fall
pastír shepherd
pastírja gen. sing. of *pastír*
pâv peacock
pẹ̑č oven
péci 2nd pers. sing. of *péči*
péči to bake, cook
pẹ́kəl masc. sing. past of *péči*
pepẹ̑l ashes
pẹ́rje feathers, plumage
pȁs dog
pẹ́sək sand
pẹ̑t five
péta heel
pîj 2nd pers. sing. imperative of *píti*
pilì (arch. for *pîli*) 3rd pers. masc. plural past of *píti*
pilọ̑ (arch. for *pîlo)* neuter sing. past of *píti*
pisâla 3rd pers. sing. fem. past of *pisáti*
pisânje writing, letter
pisáti to write
píšeš 2nd pers. sing. of *pisáti*
písmo letter, note
píti to drink
plášč overcoat
plátno linen, cloth
plȅl 3rd pers. sing. masc. past of *plésti*
pléla or *plétla* 3rd pers. sing. fem. of *plésti*
plésti to knit, braid
plętə́l variant of *plȅl*
pljuváti to spit
podvígati to raise; to advance
pojâs variant of *pâs*
poljẹ́ field, plains
póljski adj. referring to 'field' *(poljẹ́)*
pọ́ln full
pọ́t way; road
pọ̑t sweat
pọ́to hobble
pòtok brook
prâvda truth
prẹ̑dəl variant of *prȅl*
prédla variant of *prẹ́la*
prẹ̑ja yarn
prȅl 3rd pers. sing. masc. past of *prę́sti*
prẹ̑la 3rd pers. sing. fem. past of *prę́sti*
prę́sti to weave
prijátelj friend
príščˇ pimple
prodáti to sell
prosíti to ask, request
pr̂vi first
psí instr. plural of *pȁs*
psî nom. plural of *pȁs*
puščȅn released (masc. indefinite form from *pustíti)*
pustíti to release, let go

ràk crab
ráka gen. sing. of *ràk*
râki instr. plural of *ràk*
râkih loc. plural of *ràk*
rakîta variety of willow
rálo primitive plough
rẹ̑d order
rjȁ rust
rodína family (arch.)
róka hand
rokáv sleeve
rokáva gen. sing. of *rokáv*
róki loc. sing. of *róka*

rokǫ̑ acc. sing. of *róka*
rǫ̑žje grapevines
rž rye

sędəm seven
sedę́ti to sit
sə̑n sleep, dream
senǫ̑ hay
sę̑r gray (masc. indefinite form)
séstra sister
sę́ver north
síla power, force
sîn son
sinǫ̑vi nom. plural of *sîn*
sinû gen. sing. of *sîn*
sîr cheese
širína broadness, breadth
skǫ́pi stingy (long form)
sláma straw
slâmka bit of straw
slovǫ̑ farewell, parting
slúžim 1st pers. plural of *slúžiti*
slúžiš 2nd pers. sing. of *slúžiti*
slúžiti to serve, be in use
smějеš 2nd pers. sing. of *smę́ti*
smějš variant of *smějеš*
smę́ti to be allowed, permitted
smŕt death
snǫ̑p sheaf
sǫ́d judgement, sentence, court
sólza tear
sǫ́sed neighbor
sosę́da gen. sing. of *sósed*
stál 3rd pers. sing. masc. past of *státi*
stə̑r old (short form)
stâra old (fem. sing. definite form)
stâri old (masc. definite form)
stáro old (sing. neuter indefinite form)
státi to stand
stéblo stalk, stem
stəbə̑r column, pillar
stəbrí instr. plural of *stəbə̑r*
stəzə̑ path
stǫ̑ hundred
stǫ̀lp tower, steeple
stǫ́paš 2nd pers. sing. of *stǫ́pati*
stǫ́pati to tread, pace
stráža watch, guard
stríči to cut (hair), shear (sheep)
strîgəl masc. sing. past of *stríči*
strízi 2nd pers. sing. imperative of *stríči*
svę́ča candle
šílo awl

táreš 2nd pers. sing. of *trę́ti*
təmə̑n dark, gloomy
temû darkness
testǫ̑ dough, paste
tę́zati to draw, pull, drag
tráva grass
trę́sel 3rd pers. sing. masc. past of *trę́sti*
trę́sti to shake
trěš variant of *táreš*
trę́ti to bruise, grind, crack
tr̂g market
tŕnje thorns
trǫ́ba trumpet, horn
trpę́ti to suffer, endure

učeník teacher
úlica street

vâs village
vdǫ̑va widow
vdóvec widower
večę̑rja supper
vę̑liki great, large (masc. sing. definite form)
vənę̑ outside
vę́ra faith, belief
věs all, entire
vesélje joy
vę́tər wind
vę́zati to tie, bind
vę́žeš 2nd pers. sing. of *vę́zati*
vîtez knight
vlâk train
vóda water
vǫ̑do acc. sing. of *vóda* (after prepositions)
vogâl corner
vòl ox, bull
volcję̑ arch. nom. plural of *vǫ̑lk*
vǫ́lja will
vǫ̑lk wolf
vǫ́troba entrails, intestines
vrána crow
vŕba willow
vŕh top, summit
vsě all (sing. neuter)

zagozdə̑n variant of *zagožə̑n*
zagozdíti to wedge

zagožȅn past participle passive of *zagozdíti*
zájec rabbit
zákon law
zakǫ́na gen. sing. of *zákon*
zéba variety of finch
zę̑c variant of *zájec*
zélje cabbage
zelǫ̑ very, highly
zémlja land, soil, earth
zíma winter
zmâj dragon
zmíja serpent, snake
znâmo we know
znânje knowledge, skill
znâš 2nd pers. sing. of *znáti*
znáti to know
zǫ̑b tooth
zvę́zda star
zvonîl 3rd pers. sing. masc. past of *zvoníti*
zvonîla 3rd pers. sing. fem. past of *zvoníti*
zvonîli 3rd pers. masc. plural past of *zvoníti*
zvoníti to ring

žȁl sorrow, sadness
žánješ 2nd pers. sing. of *žę́ti*
žę́ja thirst
žéna wife, woman
žę́nski woman's (adj.)
žę́ti to reap
žlę̑b gutter; kennel
žlę́za gland
žǫ̑lt yellow (indefinite form)

MACEDONIAN

bela white (fem. sing.)
beleg sign, mark
belezi plural of *beleg*
belja grief, woe
brada beard, chin
breg mountain, hill, bank

čando dial. for *čedo*
čedo child
cel all, entire (masc. sing.)
cena price
čerep skull
često often
crep shallow pan
creša cherry
crešna variant of *creša*
crevo intestine
crn black (adj., masc. sing.)
crta trait, feature
crv worm
cut variant of *cvet*
cvet flower

dab oak
damp dial. for *dab*
dəmp dial. for *dab*
dožd rain
dzid wall
dzver beast, animal
dzvezda star
edzero dial. for *ezero*
*ekne** to resound, echo
ezero lake

glava head
gradište site of a former town, ruins
granica boundary, border
grlo throat
Ǵurǵov George's (adj.)

igla needle
igra game, play
inakov other, different

jabolko apple
jačmen barley
jadica angle, fishhook
jagne lamb
jandza sickness
jatok woof, weft
jazik tongue, language
jufka noodles, spaghetti
junaci nom. plural of *junak*
junak hero, youth

kluč key
kon' horse
korab ship, vessel

* Verbs are cited in the 3rd person singular.

krst cross
krt mole
krv blood

lakom greedy (for delicacies)
lakot elbow
leb bread
len flax
leto summer, year
lev left
lice face; person
ljubov love
luǵe people
lupi strip, peel

maka pain, torture
meǵa dividing line, boundary
mesec month; moon
meso meat
molen'e praying
moli ask, beg
molitva prayer
muva fly

noga foot
noḱ night
noze plural of *noga*

ogan fire
oko eye
orel eagle
orev nut
ostar sharp, cutting
otec father (usually referring to a priest)
ovca sheep (sing.)

pie drink
pieš you drink (sing.)
plel 3rd pers. sing. masc. perfect of *plete*
plen booty, loot, spoil
plete bind, braid
plue spit
pluka variant of *plue*
pojas belt
pole field, flat land
poln full
preod passage, crossing
prijatel friend
prv first

raka hand
ralo wooden plough
ramno exactly, evenly
'rbet spine, ridge (of hills)
'rǵa rust

sa all, now used only in certain fossilized expressions
se continually
sed gray
seta all (fem. sing.)
seto all (neuter sing.)
šija neck
sin son
sin blue
siot all (masc. sing.)
site all (plural)
sladok sweet
sneg snow
solza tear
son dream
štedar generous
stolb pillar, post, column
strav fear, fright
strea eaves, roof
sveḱa candle

troa a little, a bit, some
tvrdo hard, strong

ubav beautiful
ulica street
uspesi nom. plural of *uspex*
uspex success
uvo ear
uzda bridle

veḱe already, more
venec wreath, garland
vitez knight, hero
volci plural of *volk*
volk wolf
vrag devil; enemy
vrazi nom. plural of *vrag*

xemija chemistry
xram temple (arch.)
xranitel provider (of food)

zajak rabbit
zelje greens
zemja earth
žleb gutter; spout
zmej dragon
zmija snake, serpent

SERBO-CROATIAN

(All entries are cited in their ekavian form, unless otherwise specified)

anđeo angel

béda want, need, poverty
béla short form of *bêlā*
bêlī, -ā, -ō white (nom. sing. all genders — long form)
bèo white (masc. nom. sing. — short form)
bijèda in jekavian same as *béda*
bȉk ox, bull
bȉti to be; to strike
bȉtka battle
bȍb broad bean
Bôg God
bȍlan painful, sick
bráda chin, beard
brâdu acc. sing. of *bráda*
brȁšno flour
brȁt brother
brȁta gen. sing. of *brȁt*
brêg hill
brȅza birch
brȉjeg same as *brêg*
bùdi 2nd pers. sing. imperative of *bȉti* (to be)
bùha flea

céna price
cŕnac monk
cvàsti to bloom
cvêt flower
čȁsti honors (nom. plural of *čâst)*
čȅdo child
čȅšēš you comb (sing.)
čȉstiti to clean
čȉšćen past participle passive of *čȉstiti*
čȉšćēnje cleaning
člân member; participant

dȁljina distance, space
dân day
dâr gift, talent
dàska board
dȁsku acc. sing. of *dàska*
dâžd shower, rain
dȁžda gen. sing. of *dâžd;* also *dàžda, dȁžd*
dȅlo act, work
dȅvēr brother-in-law
dȅvica maiden, maid
dȅvōjka girl
dȉm smoke
dísati to breath
djèvica jekavian form for *dȅvica*
djȅvōjka jekavian form for *dȅvōjka*
dléto chisel
dȏbrī good (nom. sing. masc. — long form)
dȏbrō good (nom. sing. neuter — long form)
dôm family; home
dȍmu gen. sing. of *dôm*
dòstōjan worthy; honourable
drȁga valley, bay
dŕvce tree (dim.)
dùžnīk debtor
dvȉgati same as *dvȉzati* or *dȉzati* (rare)
dvȉzati to lift, heave
dvȍrskī pertaining to palace, yard, court (adj.)

Đurđevo St. George's Day

glâd hunger
glâđu instr. sing. of *glâd*
glâs voice
gláva head
glâvu acc. sing. of *gláva*
gnéždēnje to nest
gȍlūb pigeon, dove
grȁd hail
grâd town, fortress
grȁdovi nom. plural of *grâd*
grâđa building, building material
grȁh peas
grànica border
grèbēm 1st pers. sing. of *grèpsti*
gréda beam, girder, garden plot
grêh sin
grèpsti to scrape, scratch
grési nom. plural of *grêh*
grȉjeh jekavian form for *grêh*
gŕlo throat
gȑmeti to thunder
gvȏžđe iron

hlâd cold, shade
hlêv sty, barn
hȍđa walk, gait
hȍmūt handful
hûm hill, hillock

ìgla needle
ìgrati to play
ȉjēm 1st pers. sing. of *jȅstí*
ȉlovača silt
ȉnāk different
ìskati to demand, seek
ȉskra spark
ìspad attack, excess
ȉstina truth
ȉštēš 2nd pers. sing. of *ìskati*

jȁgne lamb
jájce egg
jȁma pit
jasika poplar
jasle manger
jēknuti groan
jēm variant of *ȉjēm*
jȅsti to eat
jéza throb, shiver
jȅzero lake
jèzik tongue, language
jȅzīkā gen. plural of *jèzik*
júha soup, broth
jùnāk hero, youth

kȁjati repent
kȁmēn stone
klȁda log, block
klâsje ears (coll.) of grain
kléti to swear
klȉcàti shout, greet joyfully
kljûč key
knègīnja princess
knêz prince
kòlāč cake, ceremonial bread
kòlena knee
kòlēnā gen. plural of *kòlena*
kònj horse
konjíčak dim. of *kònj*
kôst bone
kôšću instr. of *kôst*
kòvčeg coffin; ark
kòvčezima dat., loc. plural of *kòvčeg*
kòža skin, hide
kòžuh fur coat
kòžuha gen. sing. of *kòžuh*
krâj edge, end, country
krâlj king
krȁva cow
krâvā gen. plural of *krȁva*
krȓčma tavern
krȓst cross
krȓšćēnje baptizing
krȓštēnje variant of *krȓšćēnje*
krȓt mole
krȓvāv bloody
kúkolj tumbleweed
kùnēš 2nd pers. sing. of *kléti*
kúpac buyer, merchant
kúpiti to buy
kûpljen bought, purchased; from *kúpiti*
kûs bite, bit of food
kût corner

làgati to lie
lâkat elbow
lȁkom fond of, greed (masc. nom. sing. — short form)
lâž lie
lētā gen. plural of *lȅto*
lȅto summer, year
líce face
lȉpa aspen
lȉšće leaves, foliage
lòpata spade, shovel
lòpātā gen. plural of *lòpata*
lòvac hunter
ljúbav love
ljúbavlju instr. sing. of *ljúbav*

màgla fog
mâh fungus, moss
màk poppy, poppy seed
màlina raspberry
mànjī smaller
mêd honey
mèd copper
mèđa boundary, marker
mèla fem. sing. of perfect participle of *mèsti*
mȅra measure, step
mȅsēc month; moon
mêso meat
mèsti to sweep
mêšāš 2nd pers. sing. of *méšati*
méšati mix, stir, confuse
mȉlo dearly
mlâdō young (nom. sing. neuter)
mlȁdōst youth, youngness
mlât flail, hammer
mléko milk
mlȅti to grind
mòći to be able
mògu 1st pers. sing. of *mòći*
mòliti ask, plead
mòlitva prayer

mòždina marrow, core
mòžēš 2nd pers. sing. of *mòći*
mrȕz frost, cold
mûdrī wise
mûž husband, man
mûža gen. sing. of *mûž*

nagnézditi to nest
nàgnēžđen past participle passive of *nagnézditi*
národ nation, people, race
nèsēš 2nd pers. sing. of *nèsti*
nèsti to carry
nôć night
nòga leg
nòkat nail on finger or toe
nôs nose
nòsa gen. sing. of *nôs*
nòsīmo 1st pers. plural of *nòsiti*
nòsīš 2nd pers. sing. of *nòsiti*
nòsiti to carry, bear
nòzi loc. sing. of *nòga*
nôž knife

òganj fire
òko eye
òrah nut
òrasima dat., loc., instr. of *òrah*
òstar sharp, harsh (nom. sing. masc. — short form)
òštar same as *òstar*
òtac father
óvca sheep

pȁs dog
pâs belt
pèći to bake
pèci 2nd pers. sing. imperative of *pèći*
pèkao masc. sing. perfect participle of *pèći*
pésak sand
pîj 2nd pers. imperative of *pìti*
pȉjēš 2nd sing. present from *pìti*
písati to write
písmo writing
pîšē 3rd pers. sing. of *písati*
pîšēmo 1st pers. plural of *písati*
pîšēš 2nd pers. sing. of *písati*
pítānje question
pȉtānje nourishment
pîtâš 2nd pers. sing. of *pítati*
pítati to ask, question
pȉti to drink

plâćen past participle passive of *plátiti*
plâšt coat
plátiti to pay
plátno cloth
pléla fem. sing. of perfect participle of *plèsti*
plèsti to braid, knit
plètēš 2nd pers. sing. of *plèsti*
plȅva chaff
pljūvati to spit
pòdvigati same as *pòdvizati* (rare)
pòdvizati to lift, heave
pòjās variant of *pās*
pòlje field
prâvda truth
prȅdīvo yarn
prȅđa yarn, material for spinning
prȉsega oath
prisézati to take an oath
prîšt pimple
pròpis rule, regulation
pròsiti to beg, court
prȍšen past participle passive of *pròsiti*
prûće brushwood
pȕn full (masc. sing. nom. — short form)
pústinja desert, wasteland
pústīnjā gen. plural of *pústinja*
pùstiti to let go, release
pùšten past participle passive of *pùstiti*
pùt body
pût time (as in: "several times...")
pûto fetter, chain

ràk crab
ràkita a species of willow (*salix repens*)
rȁlo plough
ràme shoulder, upper arm
ràž rye
ȑđa rust
rȅč word, expression
rêd row, order
rȉba fish (sing.)
rȉječ jekavian form for *rȅč*
rôd type, gender
ròda gen. sing. of *rôd*
rúci loc. sing. of *rúka*
rúka hand
rùkāv sleeve
rukáva gen. sing. of *rùkāv*
rûku acc. sing. of *rúka*

sáditi to plant
sȃv, svȁ, svě all
sédeti to turn gray
sêdī gray (nom. sing. masc. — long form)
sèlo village, rural settlement
sèstra sister
sèvēr north
sȉla power, strength
sȉlā gen. plural of *sȉla*
sȉn son
sȉna gen. sing. of *sȉn*
sȉnovi nom. plural of *sȉn*
sȉnjī blue (masc. nom. sing. — long form)
sȉpati to strew, pour
sȉpljēš 2nd pers. sing. of *sȉpati*
sȉr cheese
skûpī stingy
slàma straw
slezìna spleen
slóvce dim. of *slòvo*
slòvo word
slúžīm 1st pers. plural of *slúžiti*
slúžīš 2nd pers. sing. of *slúžiti*
slúžiti to serve, do one's duty
smêš 2nd pers. sing. of *smȅti*
smȅti to dare
smȓt death
snàha daughter-in-law
snàši daughter
snàši dat. sing. of *snàha*
snȍp scheaf
sô salt
sȍlju instr. sing. of *sô*
stáblo tree, stump
stàr old (nom. sing. masc. — short form)
stârac old man
stârca gen. sing. of *stârac*
stàza path
stézati to tighten
stô table
stòla gen. sing. of *stô*
strâža guard, watch
strȅha thatch
strȅsi loc. sing. of *strȅha*
strȉći to shear
strȉga masc. sing. perfect participle of *strȉći*
strȉzi 2nd pers. sing. imperative of *strȉći*
stûp pillar, post
stûpāš 2nd pers. sing. of *stúpati*
stúpati to step, march
sûd court, government office
sûnce sun
súsed neighbor
súsēdā gen. plural of *súsed*
sùza tear
svě see *sȃv*
svéća candle
svijèća jekavian form for *svéća*

šȉja neck
širìna width
štȉca board (dial.)
štȉt shield

tārēš 2nd pers. sing. of *tȓti*
tetíva bowstring
tézati to pull, drag (now seldom used without prefixes)
tráva grass
tȓg market, trade
tȓti to rub

ùdica fishhook
ùdova widow
ùdovac widower
ùgor eel
ùho ear
ùlica street
ùmrēti to die
ùmro 3rd pers. sing. masc. perfect participle of *ùmrēti*
ùnuk grandson
ûš variant of *vâš*
ùtroba intestines, innards
ùtrobica liver (dial.)
ùzda bridle

vâš louse
vèčera supper
vela fem. sing. of perfect participle of *vèsti*
vȅra religion, belief
vèsti to lead (arch.)
vézati to tie, bind
vêžēš 2nd pers. sing. of *vézati*
vȉtēz knight
vjȅra jekavian form for *vȅra*
vojníci nom. plural of *vòjnīk*
vòjnīk soldier
vȍlja will
vrâg devil, enemy
vrȃgovi nom. plural of *vrâg*
vrȃna crow
vrâzi nom. plural of *vrâg*
vŕba willow

vȓh top
vûci nom. plural of *vûk*
vûcima dat., instr., loc. plural of *vûk*
vùga oriole
vûk wolf
vùkovi variant of *vûci*

zákon law, rule
zàova sister-in-law
zdrâvlje health
zêc rabbit
zèmlja earth, soil
zîd wall
zíma winter
zlâto gold
zmâj dragon
zmìja serpent, snake
znâk sign, symbol
známo 1st pers. plural of *znàti*
znánje knowledge
znâš 2nd pers. sing of *znàti*
znàti to know
zûb tooth
zvêr beast, animal
zvézda star

žànjēš 2nd pers. sing. of *žȅti*
žão harm, wrong
žêđa desire, thirst
žèna wife, woman
žȅnskī feminine
žènu acc. sing. of *žèna*
žèrava glowing coals
žȅti to reap
živìna poultry, livestock
žlêb manger
žlézda gland
žût yellow (nom. sing. masc. — short form)
žûtīi yellow (nom. sing. masc. — long form)

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American Contributions to the Tenth, Ninth, and Eighth International Congresses of Slavists.

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